

Proceedings

Twentieth International CALL Research Conference

Social CALL

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Hong Kong



Social CALL

Proceedings

**The Education University of Hong Kong
10 - 12 July 2019**

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Foreword

It is my pleasure to welcome you to the XXth International CALL Research Conference at the Education University of Hong Kong. More than 150 participants from more than 20 countries have submitted papers which all focus on the conference theme "Social CALL".

The International CALL Research Conferences aim to put CALL on the map as a respectable and respected discipline. As exponents of this discipline, CALL researchers and practitioners do have considerable responsibilities. Intellectual, but also social responsibilities.

Our XXth conference addresses the social dimensions of CALL, more specifically the social challenges and responsibilities in our work. Participants have brought together papers which focus on a wide variety of relevant issues such as diversity and inclusion; migration and integration; critical consciousness and critical pedagogy; intercultural and transcultural dialogue; minority languages; language for Specific Purposes (small target groups); learner-learner, learner-teacher and learner-NS interaction; the ecology of the learner; the ecology of the teacher; identities and cultures; gender issues; disabilities (cognitive, physical, sensory); the Matthew effect; privacy (recordings) and data protection; Communities of Practice; user rights; author rights and ownership; accessibility, cost, usability and usefulness of educational resources; telecollaboration and social media.

I wish to thank my associate editors, the members of our editorial board, the local organizer Ma Qing and her team, our keynote speakers Mirjam Hauck, Antonie Alm and Gu Yueguo, conference manager Ann Aerts, and all the participants.

The International CALL Research Conferences were initiated by Keith Cameron, the founding editor of *Computer Assisted Language Learning*, at Exeter University. In 2002, I was asked to take over both the editorship of the journal and the organization of the conferences. Since then, the following have been organized:

Xth edition: "CALL Professionals and the future of CALL Research" (Antwerp, 2002)
XIth edition: "CALL and Research Methodologies" (Antwerp, 2004)
XIIth edition: "How are we Doing? CALL and Monitoring the Learner" (Antwerp, 2006)
XIIIth edition: "Practice-Based & Practice-Oriented CALL Research" (Antwerp, 2008)
XIVth edition: "Motivation and Beyond" (Antwerp, 2010)
XVth edition: "The Medium Matters" (Taichung, 2012)
XVIth edition: "Research Challenges in CALL" (Antwerp, 2014)
XVIIth edition: "Task design and CALL" (Tarragona, 2015)
XVIIIth edition: "CALL in Context" (Berkeley, 2017)
XIXth edition: "CALL your DATA" (Bruges, 2018)

It is our intention to keep the CALL conferences annual instead of biennial, and to change the continent every year. Should you be interested in hosting one of our conferences, just let us know.

Jozef Colpaert

Editor CALL Journal

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Keynote presentations

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Transformative learning for the aging and aged population

Abstract

Transformative learning, conceptually speaking, consists of two essential components: transform and learning, while it, executively speaking, operates in two different but closely interconnected domains: the individual personal domain and the public educational system domain. This paper focuses on the special sector of the first domain – individuals aging 60 and living far beyond. The learning for the late adulthood is generally covered under the banner of lifelong learning. Lifelong learning, as shown in Jarvis (2004, 2005, 2009), is often treated, both conceptually and syllabus-wise, as an extension of and supplement to what is provided on traditional campus. Some retirees in China, for instance, attend 老年大学 for the courses originally offered to college or university students.

The objective of this paper is twofold. One is to explore the nature as well as practice of learning for 60-and-above individuals. The message to take home is: They need to self-transform themselves in worldviews, life styles, knowledge stores, skill buildings, etc. The other is to critically review the existing practice of lifelong learning provided by educational systems. The message to take home is: The existing lifelong learning programmes must be transformed, some areas quite drastically too, to meet the ever-changing needs of the aging and aged population. This is a continuation of my previous two studies (Gu, 2018, 2019). Hence the burden of proof is offered there.

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Social CALL: Trajectories, Turns and Trends

Abstract

Over the past five decades our field has moved through several distinctive phases: from its behavioristic beginnings, via communicative and integrative CALL, to social CALL. We will share our respective CALL trajectories up until today, with reference to these milestones, before honing in on the multifarious dimensions of Social CALL and their affordances and limitations.

Our starting points are the mid-late nineties: in very different educational and geographical contexts we were drawn to using technology for the learning and teaching of German and the cultures of German-speaking countries. We were looking for ways of making the learning process a social experience for our students, who were either physically remote from native German speakers and with no access to authentic German language resources or - for a variety of reasons including personal circumstances such as health or age, for example - had chosen to study languages at a distance. The trajectories of our social CALL experiences have taken many turns over the years, reflecting shifting language-learning paradigms and technological developments. Today, as possibilities for social CALL seem endless, we are on different paths, yet we both question the impact of the social on the learner's ability to critically engage with their learning.

We have moved from a paradigm of scarcity to a paradigm of abundance. One of the side effects, if not risks for CALL, or indeed any form of technology-mediated learning, is to become anti-or unsocial. In the second half of our talk we will explore how this trend manifests itself and consider explanations for this development. We will share with the audience what inspired us to consider what we maybe don't hear or read about, namely issues of inclusion and exclusion in CALL, and what CALL researchers and practitioners may need to draw out more to get to the core of Social CALL.

We will also challenge the audience to give thought to what we - the CALL community - can and should be doing in an era of clashes between abundance and superdiversity on the one hand, and countervailing political attempts to stem the free flow of people and communications on the other. This will ensure that language learners have the skills that prevent them from jumping into superficial conclusions about who others are and how they express themselves. Skills that encourage them to consider past as well as present literacy practices, and to take a critical stance towards today's media. We will foreground the need for a critical lens for thinking about ourselves, and for engaging with otherness both off- and online. As CALL researchers and practitioners of language learning and teaching, we will argue, we need to find ways of supporting our learners more than just linguistically in the current socio-political climate, or indeed, in any socio-political climate. This should entail learning how to use digital technologies for public engagement, global citizenship and the enhancement of democracy - for better lives and more sustainable futures.

Selected plenaries

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A comparative study of Chinese and foreign English teachers' online collaborative reflection**Abstract**

This study is designed to compare the contents, the levels, and the social network features of Chinese and foreign English teachers' online collaborative reflection in the two internet forums. The data were analyzed through content analysis, descriptive analysis, and social network analysis. The results show: a) Teachers in both forums attach importance to teaching methods and evaluation. However, the Chinese English teachers have less interest in pedagogical theory, and foreign English teachers focus more on applying educational technology into their classroom. b) Chinese English teachers' expert reflective level is much lower than that of foreign English teachers, and both of them lack establishing goals and commitment to profession. c) There are some differences of the social network features of sociogram, cohesion, and centrality analysis between the two forums.

Conference paper

Introduction

Previous studies have revealed the positive benefits of collaborative reflection and have concluded that collaborative reflection helps teachers improve their practice as professionals, and discover and develop their unique professional stances (Glazer, Abbot and Harris, 2000), and also helps facilitate their higher-order thinking (Kim & Lee, 2002), refine their teaching skills and approaches to teaching and provide a means for improvement (Martin & Double, 1998), take their knowledge to the next level through deeper analysis, application, and evaluation (Nicholson & Bond, 2003), and create the conditions where teachers learn about their practice, by talking about their experiences, becoming aware of their assumptions and expectations, questioning these assumptions and revising their perspectives (Kraft, 2002). In collaborative reflection, teachers reflect through group discussion and discourse and have an opportunity to examine their teaching practice and deconstruct or transform their existing beliefs (Akyel, 2000).

As technology-supported environments have been developed to facilitate collaborative reflection, there have been increasing efforts worldwide to encourage teachers' collaborative reflection online. Many technology-enhanced learning environments have also been widely used to facilitate collaborative reflection using feedback (Schwartz, Lin, Brophy, & Bransford, 1999; Xie, Ke, & Sharma, 2008). For example, videos have been used to allow peer teachers to observe and model how other more experienced teachers performed their teaching practices (Fadde, Aud, & Gilbert, 2009; Stockero, 2008). Furthermore, more studies have taken pre-service teachers as their research subjects. A study from South Korea found that science pre-service teachers' collaborative reflection efforts (e.g., sharing dilemmas, teaching, observing) enhanced their individual reflection, knowledge, and perspectives of teaching (Yoon & Kim, 2010). South African pre-service teachers found their collaborative reflection sessions to be positive experiences amid the many challenges of school-based teaching through an electronic discussion board (Mukeredzi & Mandrona, 2013). Online discussion board participation has also been linked to helping pre-service teachers develop their professional identity or "teacher's voice" (Sutherland, Howard, & Markauskaite, 2010).

The rise of social media services has offered new possibilities for teachers' collaborative reflection online. The form of microblogging communication can support professional and personal growth of teachers in supportive online communities through services like Twitter, Facebook, or Edmodo (Mills & Chandra, 2011). Wright (2010) found that pre-service teachers who regularly reflected upon experiences by microblogging on Twitter cultivated a sense of community around practicum experiences and decreased feelings of isolation; The character limit aided purposeful reflection and helped focus on creating more effective teaching. Krutka et al (2014) encouraged collaborative reflection among pre-service teachers using Edmodo, and findings indicated these teachers found the site highly usable, and appreciated the choice and influence afforded them through the medium.

However, this research is far from enough, and very few studies discussed the contents, the levels, and social network features of English teachers' online collaborative reflection. Thus, this study aims at answering the following research question: What are the major contents, the levels, and social network features of English teachers' online collaborative reflection in the two forums? Are there any similarities and differences between them? Are there any implications?

Methodology

Contexts, Participants and Data

This study was conducted in two internet forums. One is from *Cambridge English Teacher Online Professional Development (CETOPD)* and the other is from *Xing Si Kao Chinese Education Resources Service (XSKCERS)*. The former provides the platform of six sections: *courses, webinars, knowledge, discussion, careers and communities*. In "discussion" section, the professors, such as Penny Ur, Jack Richards, Nicky Hockly, Mike McCarthy, ect. are served as consultants, and the English teachers from more than 30 countries are the participants. The latter also provides the discussion section with 1 consultant for Chinese English teachers from all over the country. This study selected 50 topics (grammar, pronunciation, reading, speaking, listening, writing, questioning, group work, discourse, textbook, professional development, homework, curriculum, educational technology, etc.) from August 12, 2013 to June 1, 2015 respectively in the two forums. Entries of 50 topics are analysed according to the contents and the levels of collaborative reflection, and the data are classified by their ideas or statements, which are analysed and compared for answering research questions.

Instruments and Data Analysis

Coding the Collaborative Reflection Contents

This study, according to the 50 topics collected from the two forums, revised the *Topic Category of Reflection Framework* (Ho and Richards, 1993) into 7 thematic categories for coding and analysing the teachers' collaborative reflection contents (see Table 1).

Table 1. Thematic Category on English Teachers' Collaborative Reflection Contents

Thematic category	Sub-category
Theories of teaching	Theory introduction; Theory application; Personal understanding
Instructional approaches and methods	Pedagogical methods; Pedagogical content; Student development and management; School context
Evaluation of teaching	Evaluation of self's or others' teaching; Evaluation of educational issues; Solution to problem
Self-awareness of strengths & weaknesses	Perception of self as a teacher; Personal growth; Personal goal
Instructional technologies and corpus	Instructional technologies; corpus in teaching and learning
Phatic and encouraging expressions	Greetings, encouragements, etc.
Questions and replies on technology	Questions and replies on using the internet forums

Coding the Collaborative Reflection Level

This study adopted *Three Stage Developmental Model of Teacher Reflection* (Crotty, 2001) for coding and analysing English teachers' collaborative reflection levels (see Table 2).

Table 2 Three Stages of Teacher Reflection Developmental Model

	Cognitive Level	Description
Beginner Reflective Practitioner	Knowledge	1. Briefly describes the relevance of the evidence or artifacts
	Comprehension	2. Demonstrates an understanding of student development and relevant instructional plans
	Application	3. Connects college coursework concepts with practical classroom applications
	Analysis	4. Shows evidence of taking a teacher's perspective
	Synthesis	5. Establishes short term goals based upon perceived strengths and weaknesses
	Evaluation	6. Includes an awareness of their own professional development as a teacher
Intermediate reflective Practitioner	Knowledge	1. Supports and clarifies new understanding with evidence
	Comprehension	2. Examines and recommends varied instructional strategies as a result of assessing student needs
	Application	3. Demonstrates an awareness of teaching and learning theory through classroom application examples
	Analysis	4. Shows ability to take multiple perspectives (teachers', parents' students', and principals')
	Synthesis	5. Establishes professional goals for teaching and learning
	Evaluation	6. Includes references to feedback from other professionals (colleagues) about their own teaching
Expert Reflective Practitioner	Knowledge	1. Supports insight, creativity and understanding with evidence and artifacts
	Comprehension	2. Demonstrates an in-depth understanding of pedagogical theory, subject matter and student development and uses correct terminology throughout
	Application	3. Assists or mentors other teachers
	Analysis	4. Includes multiple perspectives (personal, professional, political, and philosophical) of individuals and society
	Synthesis	5. Establishes long term goals and commitment to profession
	Evaluation	6. Includes instances of giving and getting feedback from colleagues

Data Analysis

A content analysis was conducted according to the categories of the two coding frameworks. First, two researchers cooperated together to establish the standard for analysis, which is essential for the reliability of the data. Second, they classified the entries respectively into the appropriate categories. Third, Pi index was adopted for inter-coder reliability. The formula $2M/N1+N2$ can measure the agreement between the two raters. According to this, the inter-coder reliability of collaborative reflection content is 0.7, and level is 0.8, which means the classified data are reliable. Finally, the number and percentage of each category were calculated for further analysis.

Social Network Analysis Software (SNA)

Features of Sociogram, cohesion and centrality were analysed by SNA software Ucinet 6.186, which can be used to analyse social network relation in the process of teachers' collaborative reflection. Sociogram analysis aims at showing the whole structure of the teachers' collaboration. Cohesion analysis is for analysing the relations between the members and events. Centrality analysis is for measuring the individual centrality in the forum. This study selected 12 discussion topics for social network analysis.

Results and Discussion

The Contents of Chinese and Foreign English teachers' collaborative reflection

Table 3. Percentage of Teachers' Collaborative Reflection Contents in the Two Forums

Topic Category	Chinese Teachers		Foreign Teachers	
	N	%	N	%
1. Theories of teaching	91	2%	243	14%
2. Instructional approaches and methods	1173	27%	518	30%
3. Evaluation of teaching	1472	34%	462	27%
4. Self-awareness of strengths and weaknesses	335	8%	71	4%
5. Instructional technology	27	0.6%	133	8%
6. Phatic and encouraging expressions	1028	24%	201	12%
7. Questions & replies on technology	190	4%	92	5%

In Table 3, the main trend of contents in two forums is similar. Both teachers attach importance to the instructional methods and evaluation. However, Chinese English teachers concentrate more on evaluation of teaching and phatic expressions, esp. on evaluation in *new curriculum innovation*, but they have little interest in instructional technology and teaching theories. In contrast, foreign English teachers have more interest in theories and technology in teaching practice. They like discussing on *what classroom technologies are essential today? the digital divide; using technologies with young learners; teaching speaking and writing online, mobile learning; corpora and vocabulary and grammar; digital literacy; corpora and the advanced level learner; integrating technology, etc.* This may indicate they often use technology in teaching and have more experience about the technology appliance. The consultants of *CETOPD* always provide the help from the perspective of theories. Moreover, it is worth mentioning that the famous professors as the topic consultants play the central role in discussion, and give teachers strong support on teaching and learning from theory perspective, which helps them better understand the theories and exchange ideas, and also greatly encourage teachers to get more involved in applying theories into practice.

After reading the entries in detail, we also found Chinese teachers like evaluating teaching and learning while foreign teachers like describing their teaching experiences. Besides, polite and encouraging expressions are an essential means for establishing the friendly relations in online environment, and Chinese teachers pay more attention to it than foreign teachers. In addition, Chinese teachers have stronger awareness of self-development and improvement than foreign teachers. Finally, when encountering the technology problems of using internet forums, Chinese teachers normally discuss the problems by themselves and help each other or share their own experience. Fortunately, foreign teachers can get support from the moderators and technicians of *CETOPD*.

The Levels of Chinese and Foreign English teachers' collaborative reflection

Table 4. Percentage of Teachers' Collaborative Reflection Levels in the Two Forums

Stage	Cognitive Level	Chinese Teachers		Foreign Teachers	
		N	%	N	%
Beginner Reflective Practitioner	1. Knowledge	913	35.08%	267	18.2%
	2. Comprehension	18	0.69%	126	8.6%
	3. Application	58	2.23%	115	7.8%
	4. Analysis	148	5.69%	140	9.5%
	5. Synthesis	52	1.99%	22	1.5%
	6. Evaluation	316	12.14%	48	3.3%
		1505	57.82%	718	48.9%
Intermediate Reflective Practitioner	1. Knowledge	451	17.33%	59	4.1%
	2. Comprehension	29	1.11%	37	2.5%
	3. Application	166	6.38%	10	0.7%
	4. Analysis	70	2.69%	23	1.6%
	5. Synthesis	25	0.96%	2	0.1%
	6. Evaluation	221	8.49%	105	7.2%
		962	36.96%	236	16.1%
Expert Reflective Practitioner	1. Knowledge	60	2.31%	18	1.2%
	2. Comprehension	16	0.61%	181	12.3%
	3. Application	45	1.73%	300	20.4%
	4. Analysis	14	0.54%	8	0.5%
	5. Synthesis	0	0	1	0
	6. Evaluation	0	0	7	0.5%
		135	5.19%	515	34.9%

In Table 4, most teachers' collaborative reflection levels in the two forums are at the beginner stage. They briefly describe the relevance of the evidence and artifacts, and connects college coursework concepts with practical classroom applications, and few of them establish short term goals based on perceived strengths and weaknesses. However, more Chinese teachers have awareness of their own professional development than foreign teachers, but fewer of them demonstrate an understanding of students' development and relevant instructional plans. At the intermediate stage, very few teachers in both forums establish professional goals for teaching and learning. But more Chinese teachers prefer giving new understanding and expressing their novel ideas about related evidence, and demonstrating an awareness of teaching and learning theory through classroom application examples, but fewer of them examine and recommend varied instructional strategies as a result of assessing student needs. At the expert stage, in both forums, there are no statements of E5, which shows teachers lack of establishing long term goals and commitment to profession, and very few teachers analyse the relevant events from multiple perspectives of individuals and society. More importantly, far more foreign teachers (12.3%) demonstrate in-depth understanding about the related pedagogical theories, student development and subject matters and uses correct terminology throughout than Chinese teachers (0.61%).

Social Network Features of Chinese and Foreign English teachers' collaborative reflection

Sociogram Analysis

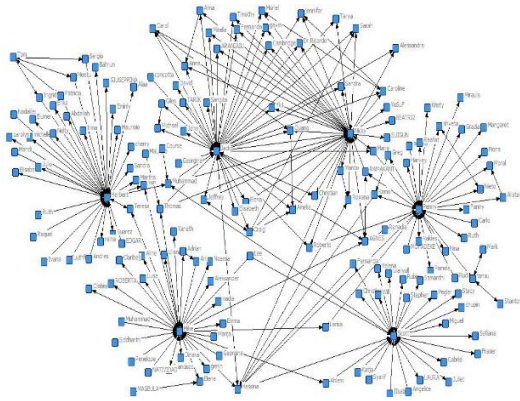


Fig. 1 Sociogram of CETOPD

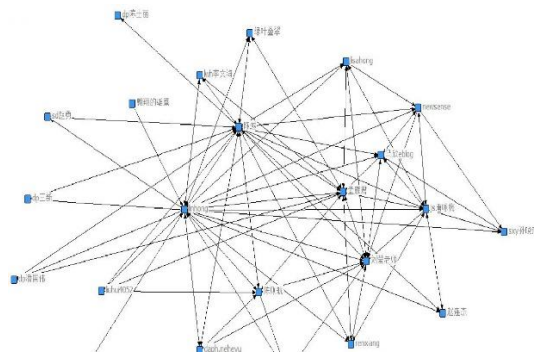


Fig. 2 Sociogram of XSKCERS

Sociogram is used to analyze the relationship between all network members. Fig.1 shows the whole network structure of CETOPD, and the connections between members are represented by directed arrows. 7 members play central roles in discussions and communication while most members just participate in several or few discussions. It is obvious that there are more nodes (161members) and ties (361) in Fig.1 than in Fig.2(29;118), which means more teachers participate in discussion in Fig.1. But the density of Fig.1 (0.0209) is lower than that of Fig.2 (0.8573), which indicates that the interaction among the teachers is more intensive in Fig.2.

Cohesion Analysis

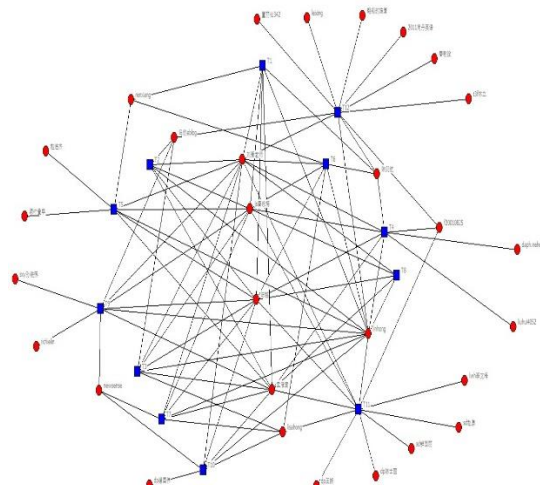
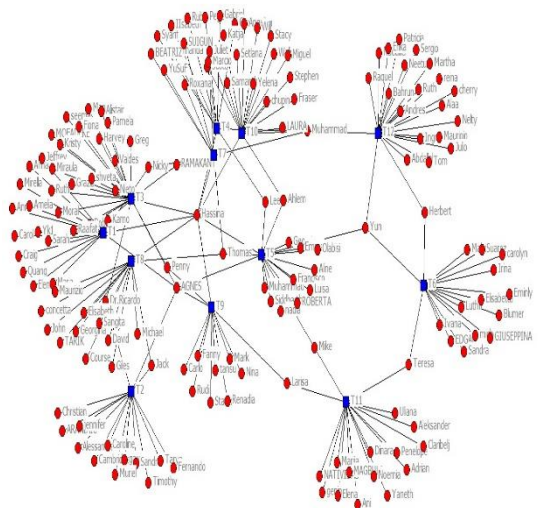


Fig.3 Collaborator-clique Connections of CETOPD Fig.4 Collaborator-clique Connections of XSKCERS

Cohesion analysis is to show the relationship between the members and the events (topics). The red nodes refer to the members in collaboration, and 12 blue squares refer to the events. The more connection between the nodes and the square, more active the members are. In Fig.3, 2 members participate in more than 6 events, which shows they participate actively in discussion, and establish more collaborative relationships with other members, and more members focus on one event, which helps further and deeper collaborative reflection. In Fig.4, 5 members participate in 10 events. They collaborate with others actively and build closer and more stable relationships with others in collaboration.

Centrality Analysis

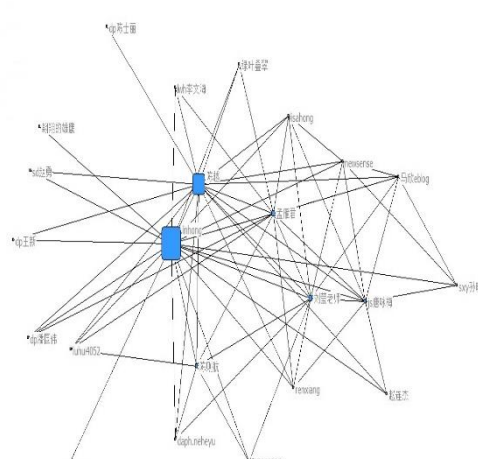
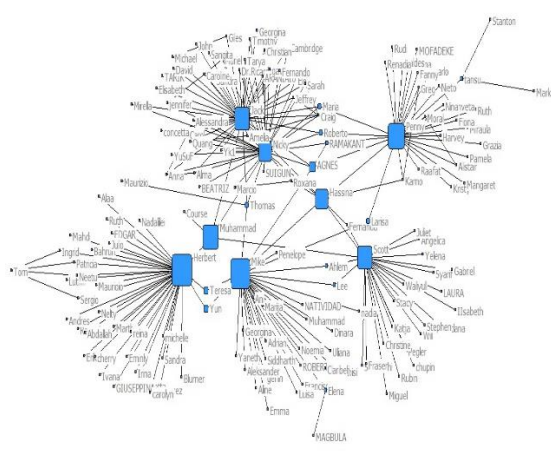


Fig.5 Centrality Power Distribution of CETOP Fig.6 Centrality Power Distribution of XSKCERS

Centrality analysis is to evaluate the importance of the members in a community, as well as an indicator to measure their status and social prestige. The members who participate in discussion regularly and actively are “core members” or “leaders”. In Fig.5 and 6, the size of the blue squares represents the members’ contribution and the influence in the collaboration. In Fig.5, 9 squares are much bigger than the others, which shows they are the leaders and have more influences than others. 6 of them are consultants and responsible for providing the discussion topics and giving teachers advice and help. Besides, 3 teachers also make the significant contributions to the discussion. However, in Fig.6, 2 squares are bigger than others, including 1 consultant, who are the leaders in collaboration, and make more contributions than other teachers.

Conclusions & Implications

This study has revealed online collaborative reflection facilitates teachers’ knowledge to be commonly shared and supports teachers’ learning from their experiences. Such professional development has been found to effectively occur when teachers work in a small group reflecting on their own or colleagues’ instructional beliefs and practices (Falk & Drayton, 2009; Yoon & Kim, 2010). From above analysis, the major findings and implications of Chinese and foreign English teachers’ online collaborative reflection are as follows:

Firstly, teachers in both forums pay more attention to their teaching strategies and evaluation, and would like to exchange the ideas and share their experience. However, Chinese teachers have weak awareness and narrow vision on teaching and learning theories, and seldom combine theory with practice. Thus, Chinese online forum does need more famous professors as the topic consultants who can guide and give teachers more professional advice and support on theories, and also encourage them to apply theories into practice. In addition, the effectiveness of online collaborations depends on such factors, like technology available to the group, the group size, the skills of the moderator/technician (Hathorn & Ingram, 2002a). Thus, Chinese online forum should have the technicians who can provide the technical support for teachers to communicate smoothly online.

Secondly, all most half teachers’ online collaborative reflection levels in both forums are at the beginner stage, and very few teachers establish short and long-term goals and commitment to profession and analyse the relevant events from multiple perspectives of individuals and society. Although there are more Chinese English teachers at the intermediate level, yet much less teachers are at expert level. One reason is that they need more supports and guidance from professional experts or consultants. The other reason is that the open time of each discussion is only 2 hours in XSKCE and only one consultant discussed with teachers. But in CETOP, each discussion always continues for several days

with more consultants' supports. Even after discussion, there are still some moderators replying the teachers' questions, which do help teachers deeply understand theories and have more confidence and willingness to apply them in practice.

Thirdly, from analysis of the 12 discussion topics, there appear different social network features in the two forums. More foreign English teachers participate actively and frequently in each discussion, and there are also more leaders who have more influences and make more contributions in *CETOPD*. It is obvious that the consultants in *CETOPD* have become the centres who guide more teachers focusing on each topic for further discussion. Thus, Chinese online forum needs more professional consultants as centres in discussion.

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The affordances of social media to develop social networks in study abroad contexts

Bio data

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Abstract

The impact on new technologies has been regarded to have had a positive impact among at-home, classroom-bound learners (i.e., internet-based tools allow for direct interaction with L2 users irrespective of location), whereas the opposite is the case for learners in SA settings (i.e., internet-based tools may disrupt and limit the level of immersion and opportunities for social interactions in the L2 with local L2 users).

In the present paper, I argue for the expansion of the analysis of affordances and constraints of both in-person- and online-only settings of communication to account for the new integrated environment enacted in SA programs that brings together the combinatorial power of both physical and virtual interactions. This new, expanded SA setting creates interactional and learning possibilities that were not available in SA settings that predated the appearance of social networking technologies.

Conference paper

Introduction

The expanded use of social media has changed the nature of the traditional Study Abroad (SA) setting in which learners were expected to be completely immersed in the L2 with few opportunities to connect with L1 speaking friends and family. Nowadays, participants in SA programs stay in daily or even hourly contact with friends, family, fellow students and local native speakers with the use of mobile applications such as *Facebook*, *Whatsapp*, *Twitter*, *Instagram* and *Snapchat*. In the popular press, the opportunity to engage in multiple and frequent interactions using the learners' L1 has been regarded as a negative feature of social networking sites that detract from the desired "total immersion" setting of most SA programs (e.g., Doerr, 2013; Huesca, 2013).

Arguably, the potential negative consequences of the use of social media in SA settings are neither as dire nor as bad as sometimes believed (for recent critical perspectives on this point see, e.g., Durbidge, 2018; Godwin, 2016). In some cases, the contact with families may provide the type of (positive) emotional support that can make the SA program viable for some students (e.g., Arbelaiz, Areizaga & Camps, 2017; Hofer et al, 2016). More importantly, learners may functionally allocate their use of social media in strategic ways that do not necessarily affect their interactions with the local community abroad. For instance, data from L2 French learners in a SA program (McManus et al, 2014) show that the use of L1 English was segregated to the context of social media with a concomitant increase in the use of L2 French in most face-to-face interactions on site.

Once we consider the nature of the examples presented above, not only can we reject the negative view of the effect of the use of social networking sites abroad, but we can also argue that SA settings bring about a type of interactional dynamics that is different than the one represented in online-only settings, or face-to-face only contexts. More precisely, it is in SA environments where we find “convergent interactional practices across virtual and physical locations” (Page, 2015: 345). In the present paper, I will argue for the expansion of the analysis of affordances and constraints of both in-person- and online-only settings of communication to account for the fact that the new integrated communication environment enacted in SA programs brings together the combinatorial power of both physical and virtual interactions. This new, expanded SA setting creates interactional and learning possibilities that were not available in the “immersion” environment of SA settings that predated the appearance of the networking technologies of the 21st century.

The differential effect of social networking sites in distinct learning settings

In general, the impact on new technologies has been regarded to have had a positive impact among at-home, classroom-bound learners (i.e., internet-based tools allow for direct interaction with L2 users irrespective of location), whereas the opposite is the case for learners in SA settings (i.e., internet-based tools may disrupt and limit the level of immersion and opportunities for social interactions in the L2 with local L2 users). The view that social networking sites have a negative effect on learning abroad is, however, misguided given that it is based on a one-dimensional view of the effect of social media (for an extended discussion, see Godwin, 2016). Once we bring into focus the analysis of both affordances and constraints of different communication channels, we can visualize the effects of social interactions mediated by new technologies. From that perspective, SA settings bring about a type of interactional dynamics that is different than the one represented in online-only settings.

Social interactions in SA settings

The most obvious advantage of SA settings is the opportunity for learners to have access to socially contextualized interactions in the L2 (as opposed to the “socially dehydrated” interface of classroom instruction). Ideally, the opportunity to engage with competent speakers of the language in a variety of social interactions beyond simply academic exchanges in SA environments leads learners to both expand the range of speakers and situations to use the language and the depth of engagement through those interactions. To achieve this socially oriented goal, SA learners need help to create social networks abroad that go beyond their immediate academic network of fellow learners and instructors. Overall, however, previous research on this topic has not identified the precise relationship between the development of students’ social networks (including their motivation/attitude) and their eventual language gains (e.g., Gautier & Chevrot, 2015). In effect, data from studies that preceded the appearance of internet-based social networking reveal as much. Rivers (1998), for instance, was among the first studies to note that students who did not develop their social networks and interactions with L2 speakers, increased their proficiency nonetheless because they spent a lot of time reading newspapers or watching TV. Similarly, Isabelli-García (2006) reports on the case of a student who did not develop his social network (he preferred to use English and had a negative attitude toward the local culture), but who still managed to improve his proficiency because he was an assiduous reader of Argentine newspapers and other media (non-interactive).

The previous discussion is useful to understand the limited knowledge we have about one of the most vaunted features of SA programs. In practice, the lofty goal of the purported environment of “complete immersion” in the SA setting has been heavily promoted, but not achieved in practice (e.g., Wilkinson, 1998, 2002). For instance, many SA programs, especially short-term ones of the type offered by US universities, are “sheltered” programs with academic courses that are taught by faculty from their own institution or local instructors and that provide some limited opportunities to interact with non-pedagogical staff from the program. Salaberry, White and Burch (2019) provide an extended discussion of the benefits afforded by new and expanded definitions of contexts of learning. In this

respect, online communication in general, and social networking sites in particular, have become a significant component of how social networks are built, grown and maintained in SA settings. I turn next to the analysis of the features of online communication that need to be part of the discussion of how SA settings promote or hinder L2 acquisition.

The brave new world of online communication

The first decade of the new century ushered in a wide range of social networking sites that have become ubiquitous in discussions about potential applications to L2 pedagogy. *Facebook*, the most successful in reaching out to a large number of users, was officially launched in 2004 and soon after *Twitter* started its operation in 2006. *WhatsApp* and *Instagram* were launched in 2009 and 2010 respectively (both were eventually acquired by *Facebook*; the latter in 2012 and the former in 2014). *Snapchat* started operations in 2011. Apart from social media platforms, there have been language-oriented applications that, one could argue, have become useful pedagogical tools (e.g., GPS-enabled search engines, *Google translate*). As an example, *Google translate* was first offered in 2006 and ten years later, Alphabet introduced neural machine translation with the goal to translate entire sentences at a time (as opposed to word by word or short phrase translations). By 2018 *Google translate* was processing 100 billion words a day with a purported user base of up to 200 million users (Wikipedia). In sum, the combined affordances of the social networking capabilities of widely used social media platforms and the new software of phones, tablets and laptops focused on social interaction and mobility has created a new set of conditions that provides new meaning to the phrase “computer mediated communication” of the 1990s.

In line with the above-mentioned statement, specific research on online interactions for pedagogical purposes has been carried out for as long as these new technologies have been in existence. In particular, there have been important studies on the characteristics and outcomes of class-to-class internet-based telecollaboration projects (e.g., Warschauer 1996; Belz 2003; Belz & Thorne 2006; Kinginger 2004), tandem learning between single individuals and individuals working on class-based projects (e.g., O’Rourke, 2005, 2007), and multiplayer online games (e.g., Thorne et al. 2009). These and other studies have been useful to understand the ways we can achieve conversational coherence in a variety of online interactions, from computer mediated communication (e.g., González-Lloret, 2011) to the asynchronic uses of tweeting (e.g., boyd, Golder, & Lotan, 2010) and Facebook posts (e.g., Warner & Chen, 2017) to the new discursive environment of retweeting (e.g., boyd, Golder, & Lotan, 2010), and the theoretical analysis of new types of online narratives such as “small stories” (e.g., Georgakopoulou, 2015). New features of social media such as multimodality, immediacy, co-construction, embeddedness, mobile use, etc. expand the range of options to communicate and interact in the L2 (see Page, 2013 for extended discussion).

In contrast with the growing database of studies focused on online learning in general, however, there have been few projects specifically designed to understand the affordances and constraints of convergent interactional practices of face-to-face and social network interactions in SA settings. A new research agenda on this topic requires a clear-eyed reconceptualization of an interactional setting that is based on the tight integration of information from various channels of interaction each one with its own affordances. To this effect, it is useful to assess what Clark and Brennan (1991: 142) list as factors that have an effect on the choice of medium of communication and the expected achievement of the interactional goal: copresence, visibility, audibility, cotemporality, simultaneity, sequentiality, reviewability, and revisability. In essence, researchers need to incorporate into their models of social interaction the coding features that help us understand the affordances and constraints of different communication media.

Interaction in the study abroad setting: In-person and on-line

As stated above, to achieve the socially oriented goal of SA, learners need help to create social networks abroad that go beyond their immediate academic network of fellow learners and instructors. Therefore, learners need to expand the range of speakers and situations to use the language and the depth of engagement through those interactions. As a consequence, the new interactional habits of learners in SA settings introduced by online communication abroad have prompted SA program designers to come to terms with a pedagogical need that actually predated the introduction of new social media technologies (see Salaberry, 2000 for an early discussion of this phenomenon). Technology has not changed the nature of the learning process. Instead, it is the ubiquitous and ever-present use of social networking sites that has prompted us to pay more attention and to harness opportunities that already existed before.

For instance, we already knew that making use of all linguistic resources at the disposal of learners was of great benefit. As an example, Hassall (2015) provided empirical evidence to show that learners faced with the challenge of learning L2 pragmatics had a better chance of success when they interacted with other students in their L1. In other cases, even more importantly, the strategic benefit of using the L1 was to provide learners with access to an expanded network of native speakers. A surprising finding from Dewey, Belnap & Hillstrom (2013), for instance, was that the improvement in L2 Arabic was explained in part by the English language proficiency of the students' social network. The greater the English proficiency of the learners' Arab friends, the more gains they were likely to make in Arabic (see also Kimura, 2019; Shiri, 2015).

With the above-mentioned strategic options in mind, I outline here a few possibilities to be pursued in research and program design.

Tracking data:

The problem faced by previous studies in SA settings to track the social interactions of learners and how they develop their social networks abroad (see discussion above) can now be effectively addressed with the use of tools from the new social media. Elola and Oskoz (2008), for instance, showed how the analysis of the use of blogs was used to study the types of interactions learners had outside of the classroom. More importantly, the access to more information about social interactions across settings (virtual and physical) will provide SA program designers with a more comprehensive understanding of how the different linguistic resources of language learners work together as part of the composite picture of L2 learning.

Multilingual identity and ability:

Through the access to more interactions in the L1, and more broadly, multilingual interactions that new social media have introduced to the SA context, L2 learners are being introduced into a type of multidimensional type of interaction that is more ecologically-valid than the compartmentalized vision about linguistic-cultural interactions of the "old" SA setting. The nature of networked multilingualism in Facebook (Androutsopoulos, 2015), for instance, showcases the new realities of online communication, and, by extension, the need to integrate, rather than isolate the new communication settings from previous (mostly physically-present) settings.

All language abilities and all linguistic resources:

The goal of providing sufficient and high-quality interactions with L2 users in the SA setting is perceived to be dependent on two important precepts: a threshold of language ability that would permit learners to meaningfully engage with L2 users on a consistent and frequent basis, and the minimal or no use of the L1 to maximize their chances to build their social networks abroad. These precepts are, however, axiomatic in nature and therefore coherently tied to a theoretical view of how L2 learning occurred in SA settings that predated the present one that incorporates a significant dimension of online communication. A minimum linguistic threshold is important, but it is not as relevant as before once we adopt learning goals that both allow learners to focus on a translingual and

multilingual learning goal and to make use of all linguistic resources available to interact in the SA context.

Translingual/transcultural identity:

Given that SA settings provide learners with the opportunity to engage in socially contextualized interactions in the L2 leads learners to work, implicitly or explicitly, on an evolving definition of a language ideology (Müller & Schmenk, 2016). As Darvin (2017: 4) explains, “[a]t the very heart of critical literacy is the examination of how meanings are represented in ways that maintain and reproduce relations of power.” The integrated SA context that was described above presents learners with a new type of social/interactional literacy that makes an integrated use of both virtual and physical interactions (as it happens in the real world of the SA setting). By way of “liberating” the learner from programmatic constraints that reflect early definitions of language learning abroad (predicated primarily on face-to-face interaction), it is possible, in principle, to focus not just on the logistical opportunities to expand the “world” of social interactions in the L2, but to expand the view to incorporate a re-definition of identity.

An integrated approach to guiding the combined nature of language interactions

The opportunities to radically change the context of L2 learning abroad are not as radical as one may expect from a conceptual point of view. By way of integrating all linguistic resources to address the learning goals of SA programs (most visibly incorporating the use of the L1), we may explicitly incorporate some of the processes in face-to-face interactions into a model that includes both virtual and physical environments of interaction in programs abroad.

One of the most obvious options to achieve this goal is to structure exchanges between learners and L2 users (e.g., in-tandem learning or language exchanges) whereby learners and expert L2 users interact in both their languages as they take on different roles (as mentor-mentee) (e.g., Fernández-García & Martínez-Arbeláiz, 2014). A second option that enhances the type and range of interactional practices is focused on the expansion of social engagements with a variety of local speakers (young and old; male and female, etc.) and the types of interactional settings also (academic and non-academic, interactional and transactional, etc.). An extension of the previous option are activities that focus learners on the explicit contrastive analysis of both linguistic uses and cultural mores, leading to the translingual and transcultural analysis of language (e.g., teaching the L1 in a local school in the L2 setting).

Conclusion

As much as Thorne (2010: 158) argued for “greater epistemological and linguistic pluralism” of the type that would lead to “increased openness to heterogeneous (and potentially stigmatized) digital vernaculars,” the present article expands that call to action to consider the types of conceptual and programmatic changes in SA programs prompted by the functional convergent allocation of communication resources reviewed above. Ironically, the perceived “negative feature” of social networking sites in the SA context (i.e., they lead to interactions in both the L2 and the L1) can become a positive one once we consider the totality of the experience abroad and the opportunities to use the full range of linguistic and cultural resources that learners bring to the task at hand.

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Paper presentations

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Quality Matters® in blended course design and development

Bio data



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Abstract

This research investigates the use and application of quality assurance rubrics and standards for online/blended course design within the context of teaching English for general academic purposes (EGAP). In an attempt to reform an existing blended course of EGAP, the Quality Matters® Higher Education Course Design Rubric (fifth edition) has been used to assure the quality of course design and development from the outset. After the course was implemented with a cohort of undergraduate students at Osaka University, it was peer-reviewed by a certified reviewer affiliated with Quality Matters (QM). The first round of peer review yielded a score of 70 out of a total of 99, resulting in failure to meet several QM standards. Based on the suggestions and recommendations of the reviewer, the course was further revised in terms of content and interface, and it was reviewed for a second time by the same reviewer, this time yielding a full score of 99. This study highlights the importance of quality assurance in online/blended course design and development, particularly in the context of teaching English to university students.

Conference paper

Introduction

Blended learning in higher education has received considerable attention (Garrison & Kanuta, 2004; Garrison & Vaughan, 2008). The most widely recognized reason for the popularity of blended learning in the literature is that it is believed to combine the best of both worlds by mixing effective face-to-face and online learning elements, given that it is well designed. The number of blended university courses throughout Japan is also increasing and is expected to grow rapidly (Gruba & Hinkelman, 2012). As McCarty, Sato, and Obari (2017) have pointed out, blended learning in the context of Japanese higher education can provide a more integrated approach to teaching and learning, prevent learner alienation, enhance completion rates, lower dropout rates, and improve the quality and quantity of interaction. With the exponential rise in the number of blended courses over the past years, the need to evaluate the quality of blended courses has also gained importance; thus, quality assessment is essential in blended course design, development and delivery (Gruba, Cárdenas-Claros, Suvorov, & Rick, 2016).

There are numerous checklists, guidelines, and rubrics for online and blended course design developed by various institutes, such as Rubric for e-Learning Tool Evaluation by Western

University (Anstey & Watson, 2018), Higher Education Course Design Rubric by Quality Matters® (Adair & Shattuck, 2015), Illinois Quality Online Course Initiative Rubric by Illinois Online Network (University of Illinois, 2018), and Blackboard Exemplary Course Program Rubric (Blackboard Community Programs, 2012). Among these guidelines and rubrics, the Quality Matters Higher Education Course Design Rubric has been selected as the main frame of reference for designing, developing, and evaluating a blended course of English for general academic purposes (EGAP).

What is Quality Matters®?

Quality Matters (QM) is an international organization that specializes in quality assurance for online education in both K-12 and higher education. It aims to promote and improve the quality of online/blended education and student learning within the United States, where the organization is based, and internationally through a variety of ways such as developing course or program quality assessment rubrics, providing professional development for online/blended course design and evaluation, and offering peer review and certification of quality in online education. As reported by Shattuck, Zimmerman, and Adair (2014), QM has been adopted by numerous educational institutions and individuals to review and assess the quality of their online and blended courses. While the QM rubric is not so well-known in the realm of foreign language education, it has been widely used and applied to different programs (see Dietz-Uhler, Fisher, & Han, 2007; Harkness, 2015; Lowenthal & Hodges, 2015; Martin, Ndoeye, & Wilkins, 2016; Kwon, DiSilvestro, & Treff, 2017).

Nonetheless, one study has been found within the literature which investigates the use of the QM rubric within an EFL (English as a Foreign Language) setting. In this study, Al Zumor (2015) examines the standards of the QM rubric, 2011–2013 Edition. The findings indicate that the rubric has the potential for enhancing online foreign language education in general and can in particular make EFL learning process more humanized by increasing the instructors' and learners' sense of online presence. Similarly, in the present study, the QM rubric has been utilized as the major reference to evaluate a blended course of EGAP.

Case Description and Setting

The blended course of English for general academic purposes, officially titled "Practical English (e-learning)", was first offered in 2012 at Osaka University with the aim of helping undergraduate students improve their academic English proficiency, getting them prepared for studying in English-speaking countries, and enabling them to gain a score of 490 to 520 on the TOEFL ITP®. The students would typically go through 12 weeks of online self-study using a commercial package called Linc English and an online library of video lessons known as English Central. Although one of the course objectives was to get the students prepared for study-abroad programs, it did not sufficiently include practice on language production in spoken and written forms and mostly focused on receptive skills.

In an attempt to enhance the existing course, the researcher jointly designed and developed a new blended course to replace the old one. The new course aims at developing students' practical English language skills, in particular speaking, in an integrated way so that they can advance to higher levels of conversational and general academic English (up to B2 and C1 levels on the Common European Framework of Reference for Languages), as well as gain skill and confidence when speaking. The course was offered at three levels to accommodate for different proficiency groups. It started with a face-to-face orientation session, during which the students were introduced to the course and were informed about the course schedule, requirements, access to online materials, assignment submission, grading policy, etc. In total, there were five face-to-face and ten online study sessions. The online component of the course was hosted on the Osaka University learning management system (LMS), Blackboard Learn. Table 1 clarifies the main differences between the two versions of the course.

Table 1
Old and New Practical English (e-learning) Compared

Course Components/Features	Old Course	New Course
Placement test	X	✓
Different levels	X	✓
Integration of skills	X	✓
Speaking/writing tasks	X	✓
Focus on global themes	X	✓
Group project	X	✓
Free of charge	X	✓
Hosted on the university LMS	X	✓
Quizzes	✓	✓
Audio-visual materials	✓	✓
Face-to-face and online sessions	✓	✓

Quality Matters Peer Review

The fifth edition of the QM Higher Education Course Design Rubric (Quality Matters, 2014) was accessed and used via a paid institutional subscription. This version of the rubric consists of eight general standards and 43 specific standards to measure the quality of online or blended courses. Annotations explain the applications of the standards and their interconnectedness. The rubric features a weighted scoring system in which standards with three-point values are considered essential, and all must be satisfied for a course to meet the QM standards overall. Also, a minimum score of 84 out of 99 (nearly 85%) is required for a course to be QM-certified. The eight general standards of the rubric are as follows.

1. Course Overview and Introduction
2. Learning Objectives (Competencies)
3. Assessment and Measurement
4. Instructional Materials
5. Learning Activities and Learner Interaction
6. Course Technology
7. Learner Support
8. Accessibility and Usability

The fifth edition of the rubric was available until July 1, 2018 before the sixth edition was released. As a result, the web link in Quality Matters (2014) takes users to the most recent version of the Higher Ed Rubric, i.e. the sixth edition, instead of the fifth which was the most recent version available during the course review and was thus utilized in this study. The new edition features the same general standards, yet there are some modifications made to sub-standards, and the total score has been changed from 99 to 100.

There are several QM review types including self-review, internal review, preparatory review, and official course review. In the present study, self-review was initially undertaken to informally evaluate the quality of the blended course. Self-reviews are confidential, and the reports are not available to anybody except for the individual conducting the review. A preparatory review was then carried out to benchmark the course. This paid review is an unofficial review process carried out by a master reviewer who is also a content expert so as to determine if a course meets QM standards. The outcome of this process is a report that provides insight on the strengths and weaknesses of a given course with recommendations and suggestions regarding areas in need of improvement.

Results

Peer Review: Round 1

The first round of the QM peer review yielded a score of 70 out of 99, implying that the course did not meet the QM standards. The course was then revised in accordance with the reviewer's comments and suggestions. Below is a list of the six essential sub-standards which were not initially met.

STANDARD 1.1 Instructions make clear how to get started and where to find various course components.

STANDARD 2.4 The relationship between learning objectives or competencies and course activities is clearly stated.

STANDARD 3.3 Specific and descriptive criteria are provided for the evaluation of learners' work and are tied to the course grading policy.

STANDARD 5.3 The instructor's plan for classroom response time and feedback on assignments is clearly stated.

STANDARD 7.2 Course instructions articulate or link to the institution's accessibility policies and services.

STANDARD 8.2 Information is provided about the accessibility of all technologies required in the course.

Peer Review: Round 2

After making amendments to the course in accordance with the recommendations of the QM peer reviewer, the course was reviewed once again by the same reviewer, and it currently meets all the requirements of the Higher Education Course Design Rubric (fifth edition) with a full score of 99/99. More details on the problems found with the course and the ways in which the reviewer's comments were addressed are described below.

STANDARD 1.1

According to the reviewer, the instructions were available, but they were not readily seen by the students. To address this issue, a welcome page was created and set as the course entry page, in which information about navigating the course menu and content was provided through written instructions and screenshots.

STANDARD 2.4

Previously, the course activities were not clearly linked to the course objectives and learning outcomes mentioned in the syllabus. The connection was clarified by assigning each type of activity to the corresponding learning outcome in the syllabus.

STANDARD 3.3

This standard was met by sharing the evaluation rubrics for speaking and writing tasks with the students. Every writing and speaking assignment included a link to its respective rubric in order to assure consistency in evaluating and scoring students' work. These rubrics were not immediately visible to guest viewers, and therefore the course was evaluated as lacking this essential component in the first round of review. However, the score for this standard was restored during the second round of review through writing a note to the reviewer on the amendment worksheet.

STANDARD 5.3

This shortcoming was rectified by adding a new section to the syllabus titled "Response Time and Feedback Schedule" in which a rough schedule was provided for responding to inquiry emails and grading assignments.

STANDARD 7.2

To address this issue, a new link was added to the course menu through which students could access a page containing information on Osaka University institutional policies for each faculty.

STANDARD 8.2

In order to meet this standard, a new page was created which contained information on the technologies required in the course, for instance a computer with a standard browser, and links were provided to the accessibility pages of the websites introduced to the students.

Discussion and Conclusion

This paper reports on a study conducted at Osaka University which involves the design, development, delivery, and evaluation of a blended course of EGAP. The course was peer-reviewed using the Quality Matters Higher Education Course Design Rubric (fifth edition), and

it currently meets all the standards of this rubric upon amendment. This study underlines the significance of continuous improvement in online/blended course design and development. The QM peer review has aided in improving the course design and development process in light of establishing clear links between learning objectives and learning activities as well as bringing more ease and convenience to students in course navigation. The course needs to be rerun before more conclusions can be drawn on the effectiveness of the changes made; however, the literature on the application of QM to online/blended learning programs—studies such as Harkness (2015) and Hollowell et al. (2017)—bears sufficient evidence to the effectiveness of the QM rubrics and peer review in assuring excellence in online/blended learning programs.

This evaluation report is based on the data collected during the first round of implementing the blended course. Running the course several times with various groups of students could add to the validity of the findings and also aid in further improving the shortcomings of the existing course. After all, quality assurance is an ongoing process rather than a one-shot procedure (Adair, 2014). Another limitation is related to lack of sustainability and discontinued practice. The course was designed and developed to fulfill the requirements of the doctoral program that the author was enrolled in; however, other instructors may not be willing to adopt it to their contexts since it requires a great amount of time and effort on the part of the instructor.

The current study has implications for online or blended course designers and developers as well as teachers. It introduces resources and methods to design, develop, deliver, and evaluate such courses. Below is a list of points to bear in mind when designing, developing, and administering online/blended courses.

- Embracing change: Since online course design and development is an on-going process, it requires constant evaluation and improvement. It is thus important to maintain a positive attitude toward making changes whenever and wherever necessary.
- Using open educational resources (OERs): It is not always necessary to create new materials from scratch. Instead, online course designers are recommended to look for OERs first and create their own content only when the latter fails.
- Considering time demands: Creating online materials and hosting them on an LMS can sometimes take longer than making traditional print materials. The process might seem lengthy, but it is usually worth the time and energy spent.
- Prioritizing course objectives: Course objectives are the main component of any educational program. It is essential to establish clear relationships between learning objectives and the rest of course components.
- Ensuring learner-friendly course structure and navigation: There is no need to emphasize that the online system where the course is hosted should be easy to use and navigate. In fact, research by Kobayashi and Little (2011) has proven that learner satisfaction with a course is strongly dependent on the ease of use and navigation of the online interface.
- Explicitly stating the requirements: All requirements including regulations, assignments, and projects should be clearly and explicitly communicated with learners to ensure success.
- Setting clear evaluation criteria: After deciding upon evaluation criteria such as grading policy and rubrics, learners should be informed of them.
- Paying attention to accessibility and usability: With the rise in the diversity of learners, it is essential to ensure that a course is accessible to and usable for all learners.
- Fostering social presence: Building an online learning community with peers and instructors can help improve the sense of social presence and stop learners from feeling isolated in the online environment.
- Providing technical support: Unpredicted technical issues can occur any time, but it is important to provide learners with sufficient technical support both in case of system failures and when shortcomings in learners' computer skills stop them from performing online tasks properly.

The author also recommends designers to take a look at an evaluation rubric before embarking on the task of course design so as to assure the appropriacy of their choices and decisions from the outset. This latter point further highlights the significance of faculty development in using rubrics such as the QM rubric. In fact, QM provides professional development courses and workshops for faculty who wish to learn about effective online course design as well as those who aim at becoming QM peer reviewers. Roehrs, Wang, and Kendrick's (2013) study on preparing faculty to use the QM Model is a recommended source to refer to for universities and institutes of higher education which are considering the adoption of this model.

As a final word, like many institutions of higher education worldwide, Osaka University is adopting online and blended learning more than ever before. As suggested by Roehrs et al. (2013), more online courses will be implemented from now on, and this stresses the increasing need for more faculty development opportunities to assure quality in online education and student satisfaction. The author hopes that this study can inspire instructors and researchers at Osaka University and other universities around the world to consider the benefits and affordances of blended learning and to enrich their students' learning experiences through offering quality blended courses.

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The impact of social media on language learning: a Saudi university case study

Bio data

Sahal Alshammari holds Ph.D. in the area of TESOL/linguistics from University of Kansas, USA. Besides research papers to his credit, he has also authored a couple of fictions in Arabic language, of which *Yasir* has been declared best-seller with more than 30,000 copies sold so far. He has written scripts for educational films as well as documentary films for various media channels.

Abstract

The influence of social media has not been fully investigated in the Saudi context to determine whether it has a positive or negative impact on learning English. This paper examines the influence of social media on learning the English language by correlating Level 2 (L2) learner's daily use of social media with their overall academic achievement. A questionnaire-based survey is used to explore the use of social media by 102 English L2 learners in the English department at Northern Border University. It correlates the academic achievements of the participants in skills courses with their use of social media. Other variables such as family background, gender and socio-economic status (SES) are investigated to determine whether they affect social media usage. The results of the study prove the influence of social media on L2 learning in the context of Saudi Arabia, particularly reading and vocabulary. Other language skill variables such as writing, speaking and listening as well as the variables for family background, gender and SES show no significant correlation. As a result, social media can be considered an effective tool for teaching English to L2 learners outside as well as inside the classroom.

Conference paper

Introduction

The growth in the use of social media is unparalleled (Tess, 2013). Its widespread use is considered a distraction from other aspects of life including education and many educators complain that social media affects the process of learning. This study investigates the effectiveness of social media to ascertain whether it is a supportive tool for language learning. The context for this study is Saudi Arabia where English is considered a foreign language and where L2 learners have few opportunities to practice using English outside the classroom. The rapid development of social media has enabled users to participate in rather than be negative receivers of it (Liu, 2017). In other words, social media can provide L2 learners with an alternative environment where they can use the second language they are learning in interactions outside the classroom. This opportunity has not been investigated, at least not in the Saudi context. Most studies have sought the perceptions, attitudes and beliefs of learners and educators about social media and its influence on L2 learning. Moreover, other studies have tested the influence it has on L2 learning within the classroom and adapted particular tools within the parameters of education. This study takes a different approach. It seeks to find a correlation between L2 learners' authentic use of social media in everyday life and their actual levels of language learning based on

the grade point averages (GPA) of their language skills course to assess whether social media can be an effective factor in language learning.

Literature Review

Teaching a foreign language has always been difficult in environments where instructors play a central teaching role. Many studies indicate that teaching English in Saudi universities is still a struggle, and that outcomes, particularly in writing are poor (Alrabai, 2014; Zahid Javid and Umer, 2014; Sahal Rghailan Alshammari, 2016; Barnawi and Alhawsawi, 2017; First, 2018; Sahal R. Alshammari, 2018). However, huge advances in technology have created unique and free opportunities to develop outcomes in English in the classroom in both second and foreign language contexts. Instead of expensive laboratories that cost millions of dollars to establish and just as much to maintain, smart devices provide students with access to free programs and applications that support their conscious and unconscious language learning. A strong point of social media is that it is based on a different model to that of the traditional classroom. Learning English in a classroom uses a teacher-based approach with the teacher at the center of the learning process and where learning the second language is achieved through grammatical drills (Alseghayer, 2005). Whereas learning using social media is based on sharing, creating, discussing and modifying user-generated content (Ahlqvist, Bäck, Halonen and Sirkka, 2008). Therefore, social media offers a new approach to teaching and learning a new language.

Various studies have been conducted to explore the influence of particular platforms on specific aspects of language learning. Ariana and Mirabela (2014) conducted an experiment to investigate the influence of Facebook on vocabulary learning. 127 college students in their first and second years at the Faculty of Economic Sciences participated. The results indicated an improvement in vocabulary performance, although it was not significant. The participants in the Facebook group were more motivated and the lessons via Facebook seemed to appeal more to them (Ariana and Mirabela, 2014). Another study examined the influence of Web 2.0 tools on learning new vocabulary (Eren, 2015). The results indicated that the experimental group statistically outperformed the control group in gaining new vocabulary.

Another aspect of language learning that has been investigated is reading skills. Reading in English is difficult for Arab learners as the English writing system is very different from the Arabic system (Feghali, 1997). For example, the writing system in English works from left to right whereas Arabic writing goes from right to left. Therefore, support from social media in reading skills is crucial. Mahmud and Ching (2013) investigated how Facebook enhanced L2 learning, particularly reading and writing. The participants were exposed to activities implemented via Facebook. The activities consisted of three tasks, reading, writing, and discussion. The results showed that Facebook had a positive influence on L2 learners' attitudes to language learning in general, particularly reading, writing and grammar (Mahmud, Ehsan and Ching, 2012). A similar study explored the effectiveness of integrating the use of blogs in English as a second language (ESL) classrooms. The study targeted low proficiency students to determine how blogs improved L2 learners reading, writing, and discussion skills (Abu Bakar, Latif and Ya'acob, 2010). The results showed that L2 learners believed that their use of the blog had enhanced their communication skills and reduced their anxiety.

Research Questions

1. Does social media have an impact on language learning skills? If yes;
2. What skills are significantly affected by social media?

The Methodology

Study Sample

102 students from the English department on the Rafha campus of the Northern Border University (NBU) participated in this study, of which 54 were female and 47 were male.

The participants were selected during the third through to the eighth semester. They were asked to bring a copy of their transcript as a condition of participating to ensure they had the right grades. It is not a goal of the study to encourage students to use social media and then assess its influence on their language learning. The main goal is to investigate the L2 learners everyday usage of social media and its influence on their behavior. It is expected that the findings of the study will produce a perspective that influences students to use social media as a study tool outside the classroom to boost their language skills.

Study Tools

The main research tool is a questionnaire that attempts to correlate participants' use of social media with the grades they achieved on their skills course. The first part of the questionnaire relates to students' academic achievements and their grades from the skills courses in listening, speaking, reading, and writing. The researcher added two courses, vocabulary and grammar because they are related to the skills courses, particularly to writing and language learning in general. The total GPA is added to the items to ascertain whether social media has an effect on their total achievement. The second part relates to the quantitative use of social media and focuses on aspects such as the number of activated accounts, time spent, and the period since participants joined social media. The third part focuses on the qualitative use of social media. It is related to the type of social media and the preference for using social media. It explores why participants use social media in English and what language they choose to use, whether they prefer speaking or writing and favor listening over reading while interacting on social media. The questionnaire was designed by two expert instructors who have been teaching English to L2 learners for several years. It was also reviewed by professors from the English department in the NBU. The items in the questionnaire were found to be highly reliable ($\alpha: .898$).

Study Procedure

The questionnaire is designed to investigate whether there is a relationship between type and amount of social media use and L2 learners' achievements in language learning. First, the data is analyzed to discover if there is any difference in the use of social media between genders. Next, both the quality and quantity dimensions are correlated with grades in an attempt to discover if social media usage has any impact on second language learning. The English department at NBU runs compulsory courses in language skills, including: Listening and Speaking 1, Listening and Speaking 2, Reading 1, Reading 2, Writing 1, Writing 2, Advanced writing, Vocabulary 1 and Vocabulary 2. As the participants are all at different levels, they were asked to produce the grade from their latest course in each of the language skills along with those from the vocabulary courses. They were also asked to provide a copy of the latest version of their transcripts to confirm their scores.

This study limits its investigation to the use of social media in the English language. Therefore, all the answers to the quality and quantity dimensions relate to the use of English, not Arabic. For example, the following answer would be in the quantity dimension: I spend x number of hours using social media in English. The participants are given four choices: Less than an hour, 2-4 hours, 4-6 hours or more than 8 hours. The main goal of this paper is to determine whether there is a correlation between social media usage outside the classroom and academic achievement inside the classroom.

Generalization of the Results

This study explores the impact of social media on different aspects of language learning. First, the only significant relationship is between students' achievement. The second dimension is between students grades in reading skills and time spent on social media ($r(100) = .238$, $p = .017$). as shown in Table 1.

Table 1. Correlation between Reading Academic Achievement and Time Spent on Social Media (daily)

	Reading	Time Spent on Social Media (hours)
Pearson Correlation	1	.238**
Sig. (2-tailed)		.017
N	101	101
Pearson Correlation	.238**	1
Sig. (2-tailed)	.017	
N	101	101

** . Correlation is significant at the 0.01 level (2-tailed).

The results show that the more students use social media in English the better their reading skills are. Other relations show no significant correlation between students' achievement. This dimension includes the number of activated accounts they had when they started using social media and their language preference.

The third dimension includes the type of social media and indicates two significant relationships. First, the results show that the more students use social media for an academic purpose the better their reading skills are ($r(100) = .273, p = .006$), as illustrated in Table 2.

Table 2.

Table2. Correlation Between Reading Academic Achievement and Using Social Media for Academic Purposes

	Reading	Using Social Media for Academic Purposes
Pearson Correlation	1	.273**
Sig. (2-tailed)		.006
N	101	101
Pearson Correlation	.273**	1
Sig. (2-tailed)	.006	
N	101	101

** . Correlation is significant at the 0.01 level (2-tailed).

Second, the results indicate that having friends on social media will improve the vocabulary for L2 learners ($r(100) = .216, p = .030$), as shown in Table 3.

Table 3. Correlation Between Vocabulary Academic Achievement and Using Social Media to Make Online Friends

	Vocabulary	Using Social Media to Make Online Friends
Pearson Correlation	1	.216*
Sig. (2-tailed)		.030
N	101	101
Pearson Correlation	.216*	1
Sig. (2-tailed)	.030	
N	101	101

*. Correlation is significant at the 0.05 level (2-tailed).

Other aspects of using social media such as preferences for using receptive skills, reading and writing, and productive skills, speaking and writing have no influence on students' academic achievement.

To determine whether there are any statistical differences between males and females use of social media, an independent sample t-test was conducted. The results show that there are no statistical differences between males ($M=3.13, SD=.43$) and females ($M=3.06, SD=.40$), conditions; $t(.100) = .804, p=.423$, as illustrated in Table 4. This means that both male and female students have the same language preferences when using social media in English. Although the male and female students study in separate buildings and have their own instructors and the same syllabus, their social media preferences are universal and go beyond the limits of the college.

Table 4. Statistical Differences Using Social Media Between Males and Females

Gender	N	Mean	Std. Deviation	t. value	p. value
Male	48	3.13	0.43	0.804	0.423
female	53	3.06	0.40		

Discussion

The literature review shows the positive influence of Facebook on vocabulary learning (Ariana and Mirabela, 2014), which is in keeping with the findings of this study which shows that having online friends on social media has a significant correlation with high academic achievement on vocabulary courses. This might be due to the need of L2 learners to use new vocabulary while chatting with native and non-native English-speaking online friends. Also, vocabulary courses provide L2 learners with an enormous amount of new vocabulary, so social media represents a practical field for using it. Moreover, the study shows a significant correlation between academic achievement in reading with time spent on social media and the use of social media for academic purposes. Various studies have confirmed the positive influence of social media on reading skills (Abu Bakar et al., 2010; Mahmud et al., 2012). However, this study is notable in that it tests social media as a non-scholastic activity as practiced by learners in their daily lives. Therefore, we can confidently say that social media, particularly Facebook, has a positive impact on reading skills because it has been tested as an effective tool in the classroom (Mahmud et al., 2012) as well as outside it; in both cases the results show a significant influence on reading skills.

Although three significant relations have been found in this study, many variables did not show any significant correlation with academic achievement particularly writing, listening, and grammar skills. Moreover, there was no significant impact found due to family background, gender and SES on the nature of the usage of social media. This might be due to the fact that the participants are L2 learners who study English in a foreign language context, and only use English for academic purposes. Therefore, when asked about their language preferences when using social media in their everyday lives, the majority i.e. 76 percent chose Arabic. This shows that the majority of participants use Arabic when using social media so only a few variables influence the enhancement of their skills.

However, the study presents authentic data after testing for the actual influence of social media on students' academic achievement. It agrees with the findings of other studies regarding the influence of social media use on reading skills (Abu Bakar et al., 2010; Mahmud et al., 2012). Unlike other studies it did not present the use of social media in the classroom but tested its influence outside the classroom. Moreover, it correlates student usage with student grades to produce reliable results. The results of this study and others confirm the importance of using social media as a supporting tool for teaching English as a second language. It demonstrates the influence of social media even in an environment where supportive cooperative classroom learning is not officially carried out as is the case of Saudi Arabia.

Conclusion

This study confirms the influence of social media on L2 learning in the context of Saudi Arabia particularly on reading and vocabulary. It provides new evidence that using social media unconsciously and outside the classroom is effective at enhancing learners' reading and vocabulary skills. Therefore, English departments should encourage their students to use social media in the English language. For example, they could organize scholastic events on the use of social media in English and form groups for peer interaction. Finally, more research should be carried out to explore the influence of social media on various aspects of language learning in different contexts.

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Integrating North Korean defectors into the South Korean education system

Bio data



Abstract

Entrenched in South Korea's formal education system, North Korean defectors have been substantially marginalized and their rights to education have not been fully fulfilled. They face complex educational impediments pertaining to mental illness, language barriers, social prejudices, financial debt from brokers, and lacking common knowledge to understand new curriculum. While various educational stakeholders such as government agencies, alternative schools, and NGOs have provided educational assistance programs, the impacts have been insignificant or a short-term success. Thus, this paper proposes seven alternative policy solutions and evaluates each of them based on three criteria consisting of cost, efficacy, and feasibility. Based on the rates, the paper illuminates the three most optimal policy solutions that could successfully integrate defector students.

Keywords: *defectors, migration, social discrimination, student adjustment, resettlement, educational policy, integration, South Korea*

Conference paper

Introduction

There is an increase of North Korean defectors entering South Korea. A study by the Ministry of Unification (2018) reported that 947 defectors entered South Korea in 1998. In 2018, the number has grown to 31,827, 50 percent under age 29. Neglected and treated as outcasts in their new education system, there is a growing need to understand how to fully integrate the refugees. This paper will examine the processes and issues defectors face integrating into the South Korean education system and society followed by alternatives recommendations.

Causes of Defection

According to NK News, personal freedom was the primary reason for recent North Koreans' defection in 2014, followed by socioeconomic factors (Ji, 2016). The increasing discontent with the regime due to censorships, economic hardships, and hunger motivated North Koreans to defect. Recent changes in the gender ratio increased as more women continued to defect in comparison to males in order to escape human trafficking, as females totaled more than half of the defectors in 2002 and 83 percent in 2017 (KEDI, 2018).

Challenges for Defectors in Education

Defectors are in worse conditions regarding health, medical care, education, employment, and rights. They are susceptible to serious mental health problems, resulting in education integration difficulties. Experiences of violent traumatic events before defecting still haunts their mental health. A study involving post-traumatic stress disorder (PTSD) and depression found that nearly 71 percent of defectors experienced PTSD symptoms while another 29-49 percent displayed prevalence of depression symptoms (Park, Lee, & Jun, 2018). Not only did these factors hindered the defectors' adjustment, but they also suppress their anxieties. Being trapped in cycles of negativity, isolation, and hostility, this was called 'Masked Depression', a term used when a North Korean student is suffering from depressed but does not speak out (Kim, 2015). The article noted that Masked Depression led to: school absences, alcoholism, smoking, and internet-binging, leading to school dropouts.

Several defectors report that the language barrier is troublesome as the two countries have different terminologies. According to Kwong (2018), while defectors understand 70% of South Koreans, South Koreans cannot understand defectors. The article notes defectors feel the need to learn the Seoul dialect to be successful. This also includes learning English, where North Koreans struggle in courses that primarily use English learning material. This problem is severe that a 2016 study by the Korea Development Institute (KDI) found that 30 percent of defectors dropped out, citing English difficulties as the reason (Choi, 2018).

South Koreans' attitude towards defectors have shown a deteriorating trend. In 2005, a survey conducted by South Korea's Unification Ministry showed that 15 percent expressed negative public opinions; however, that proportion surged to 41 percent in 2015 (Yong, 2016). Lee and Son's (2011) study also showed that South Koreans in their 20s has the most negativity towards defectors. The study speculates that the two nations' split for more than 50 years caused the young generations' such antipathy (Sung & Go, 2014).

Many defectors reach South Korea through brokers in which the costs from \$2,500 to \$15,000 (Fifield, 2017). Usually deferred to the South Korean government, however, those payments were reduced from \$9,400 to \$5,600 in 2005 to prevent a developing business in defector smuggling (Lankov, 2006). This yet left many defectors with considerable debts, forcing young defectors to pursue low wage jobs instead of education (Ryu et al., 2015). Consequently because of the debt, employer prejudice, and lack of working rights awareness, North Koreans were exploited, underpaid, and cannot afford extra schooling to keep up with South Korean counterparts.

Defector students lack the foundational knowledge. South Korean textbooks are predominantly based on Western European and American cultures, whereas North Korean textbooks are widely influenced by Chinese and Russian cultures (Kwon, 2012). According to a research conducted with elementary defector students in 2012, they often struggled in understanding textbook contents due to the American and South Korean historical figures (Kwon et al., 2012). The defectors' lack of background knowledge caused alienation during class, entailing passive participation, and impeded their academic interest.

Third Country Nationals

The Ministry of Unification also recognizes another group, Third Country Nationals (TCNs), who are half-blooded North Korean immigrants coming from abroad. TCNs have accounted for approximately half of total North Korean defectors and about 60% of those TCNs are from China (KEDI, 2018). They are only provided partial government benefits and are ineligible for affirmative action status, while North Koreans are guaranteed a certain number of quotas from universities (KEDI, 2018). Thus, TCNs are subjected to significantly more competitive college application processes, competing with domestic students.

Since TCNs have mostly resided in foreign countries – China, Vietnam, etc – they often struggle due to significant language barriers. Furthermore, parental involvement in supporting the TCN's education would also pose challenges as both parents would be

unable to understand the South Korean textbooks (KEDI, 2018). Therefore, TCN students are weakly equipped to educate in Korean.

Current Resettlement Programs

Numerous educational assistance programs have been provided by various educational stakeholders. Nevertheless, as the Asan Institute argues “Quantity is no substitute for quality” (Seo, 2017) regarding the current resettlement programs, many of them are insignificant or focused on a short-term goal. The Ministry of Education’s affirmative admission policy excludes TCNs from beneficiaries and its 12-week adaptation training program, Hanawon, lacks physical capacities and vocational education to address the defectors’ financial constraints (KEDI, 2018; Kirk, 2016). Furthermore, government-funded e-learning websites fundamentally cater towards local students and issued supplementary textbooks exacerbate the defector students’ study burden, which shows a stark contrast to the original intent of each learning method (Ministry of Education, 2018). Most of alternative schools are also ineligible to grant official accreditation (Koh, 2016)

Policy Alternatives to Integrate North Korean Defectors into the South Korean Education System

Defectors face problems such as high school dropping out and prejudice. If the status quo is to continue, North Korean defectors may permanently be labelled as outcasts. Thus, seven policy alternatives are proposed to address issues pertaining to their integration in South Korea’s education system.

Policy Alternative #1: Ministry of Unification and Ministry of Education – Equal Government Benefits for Both North Korean Defector Groups

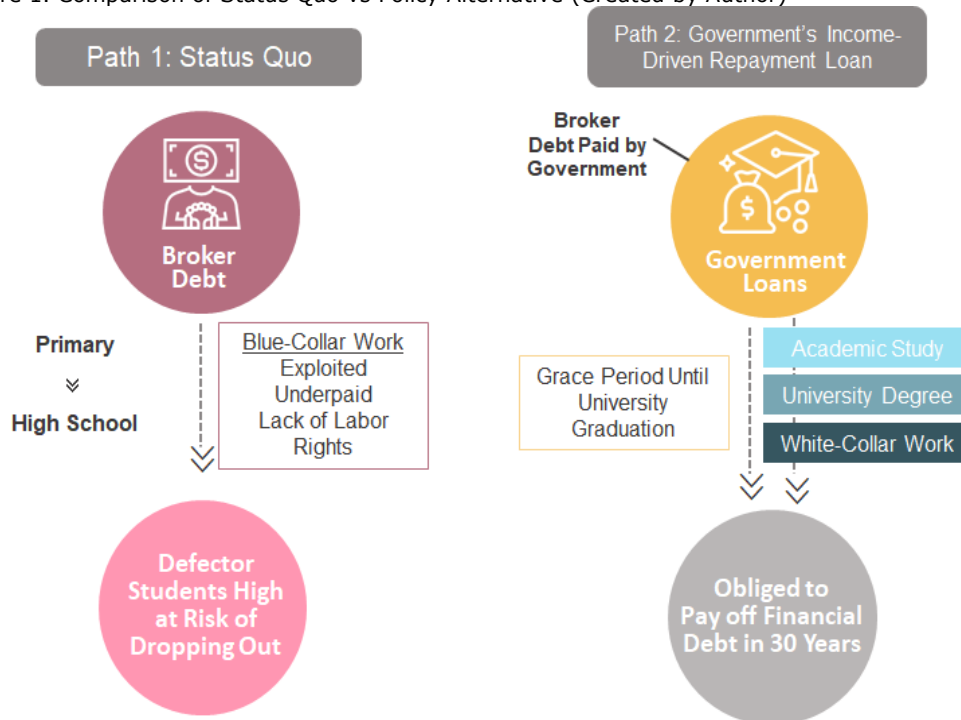
The Ministries of Unification Education should reform policies such that defectors and TCNs are both recognized as North Korean defectors and provided equal government benefits. By implementing a more inclusive policy reform that entitles TCNs to also receive affirmative action status and full university tuition support, the government could alleviate the financial burdens that have previously prevented TCNs from enrolling in higher education. Through such policy reform, the Korean government would benefit more than half of the total North Korean defectors who previously were excluded from government support. Subsequently the government could fulfill TCNs’ fundamental human rights to higher education and reduce their marginalization, resulting in the TCNs’ integration into the South Korean education system.

Policy Alternative #2: Ministry of Unification and Ministry of Education – Income-Driven Loan Repayment Initiative

The Ministries of Unification and Education should enable an Income-Driven Repayment Loan plan for North Korean defectors by paying off their broker fees upfront. Currently, North Korean defector students are illegally working to pay off their broker fees. As a result, defector students are being exploited. Thus, North Korean defector students are susceptible to vicious cycles of economic struggles from being unable to pay off their broker expenses, thereby exacerbating their risks of dropping out of public education.

By lending enough monetary funds to pay off broker fees, the government could alleviate North Korean defector students from their financial debt and incentivize them to focus on their academic studies instead of resorting to blue-collar work. The government could set conditions where North Korean student borrowers are granted grace periods where they do not start repaying their loans until post-university graduation. As such, North Korean defector students who find employment after attaining their university degrees could gradually repay their financial obligations to the government in a 30-year timeframe based on income without interest rates. For example, a North Korean defector student who graduates and earns the equivalent of \$50,000 USD could repay his/her government loan in thirty years whereas a North Korean defector graduate who earns \$100,000 USD could repay in fifteen years. Thus, an income-driven loan repayment plan could enable more primary school students to become more academically involved and ensure the likelihood of a higher salary professional occupation.

Figure 1. Comparison of Status Quo vs Policy Alternative (Created by Author)



Policy Alternative #3: Ministry of Unification – Establishment of the Office of Inter-Korean Cooperation

The Ministry of Unification should further establish its impact by creating a sub-agency, the Office of Inter-Korean Cooperation, responsible for inter-agency collaborations within the various Korean ministries. Since Hanawon is only short-term, the Ministry of Unification cannot ensure full defector assimilation.

The Ministry should seek to play a more long-term role as a mediator between North Korean defectors and other Korean ministries to further establish North Korean defectors’ assimilation. For example, the Ministry of Unification’s Office of Inter-Korean Cooperation could jointly coordinate a mentorship and tutoring program with the Ministry of Education by connecting North Korean defector students to local university students, thereby enabling more North Korean students to receive academic support.

The Office of Inter-Korean Cooperation could implement public awareness campaigns in association with the Ministry of Culture to address school bullying and social prejudices attached to North Korean defectors. Examples of public awareness campaigns could include North Korean defector speaking events in public schools, essay and arts contests hosted by school districts depicting North Korean students’ struggles, school festivals that foster the sharing of cultures between North Korean and domestic students through food and music, and more.

In addition to jointly implementing programs with other ministries, the Office of Inter-Korean Cooperation could be an accountability office and ensure that other ministries are implementing their North Korean integration programs effectively. As previously mentioned, the Ministry of Education currently lacks oversight of its ‘Preferential Admissions Program’, a policy requiring Korean universities to recruit a certain number of North Korean high school graduates for admission. Thus, due to the lack of enforcement by the Ministry of Education, roughly 25 domestic universities failed to meet the policy requirements and consequently did not accept any North Korean defector in 2013. The Office of Inter-Korean Cooperation could therefore hold the Ministry of Education accountable and advocate that it strictly enforces its policies by publishing publicly-available performance reports of the Ministry of Education.

Policy Alternative #4: Ministry of Unification - Reform of Hanawon through Decentralization and Cross-Collaboration with Agencies & NGOs

Figure 2. Additional Hanawon Localities in South Korea
(Created by Author)



While Hanawon provides a 12-week training program that is crucial for resettlement, the small facility cannot fully accommodate all incoming defectors (Kirk, 2016). Thus, one proposition would be to create a more collaborative platform with both Korean ministries, other provincial governments located outside of Seoul, and civil society organizations. The core idea of the plan would be to expand services by decentralizing Hanawon as a single facility based in Seoul to establishing additional local centers in coordination with other provincial governments and NGOs located outside of Seoul. In doing so, there could be less capacity constraints solely on the Seoul facility by balancing responsibilities with other partners. Ultimately, by offering Hanawon in additional localities, the lack of facilities could be resolved (Figure 2).

Furthermore, Hanawon could benefit from its collaborations with other Korean ministries, which could result in long-term impact. For example, Hanawon could connect defectors who are nearing the completion of the program with the Ministry of Education to facilitate the defectors' transition into the appropriate public schools with certified teachers who can effectively teach North Korean defectors. Furthermore,

Hanawon could incorporate vocational programs in its education curriculum by collaborating with neighboring vocational schools as well as providing additional language lessons and psychological counseling in collaboration with NGOs such as Liberty in North Korea, Teacher for North Korean Refugees, World Vision, and more. By providing educational assistance with the support of NGOs, Hanawon could ensure the continuation of defectors' Seoul dialect and English language-learning as they could transition into the following NGOs' language programs once completing Hanawon. Additionally, by supplementing Hanawon with NGOs' support, the Korean government could better address the psychological challenges that defectors may experience as NGOs could be better equipped with the necessary expertise to properly identify and mitigate the issues.

Policy Alternative #5: Ministry of Education - Additional Content on E-Learning Websites that Cater Towards North Korean Defector Students

Current contents are fundamentally designed for domestic students thereby lacking the capacity to meet defector students' educational needs. The government's investment on developing supplementary textbooks entailed unexpected aggravation of the defector students' academic stress. To alleviate the students' overwhelming academic burden while promoting learning engagement, the Ministry should expand its efforts on developing e-learning materials instead. Special themes need to be added for defector students such as historical context and events, vocabularies/terminologies, examination system, and more. In this regard, the e-learning materials would enable a more interactive and friendly learning environment for defector students. To provide for TCNs who lack Korean, the learning materials should also be provided in multiple different languages. These websites should also be further utilized as virtual spaces where defector students can conveniently receive education assistance by interacting with educators, sharing knowledge with other peers, and networking through communication.

Figure 3. Supplemental North Korean Learning Contents in E-learning Website (Created by Author)



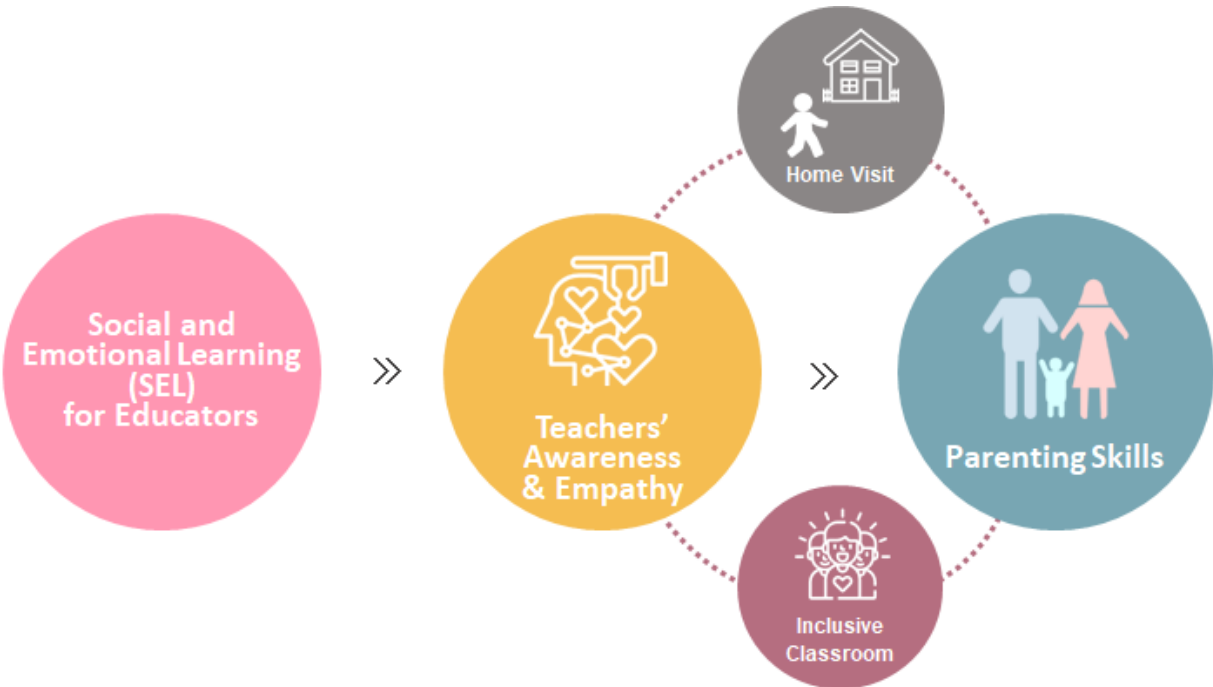
Policy Alternative #6: Ministry of Education - Accreditation of Alternative Schools that Meet Education Standards

The Korean government should also consider the process of accrediting additional alternative schools and refer to Yeomyung School as a benchmark. The Ministry of Education could host workshops and conventions to jointly develop curriculums that may accommodate the needs of the North Korean defectors while also meeting the educational standards to be eligible for diplomas. The Ministry could provide teaching materials with opportunities for the alternative schools to make certain changes to best accommodate the students’ needs. Furthermore, the Ministry could host knowledge sharing symposiums in which teachers from established alternative schools could exchange their teaching methods with other teachers to better engage and communicate with students. As defectors rely on alternative schools as their last chance, the government should ensure that the defectors are granted diplomas for their efforts rather than making them overcome additional obstacles. By cross-collaborating with alternative schools, not only will the government provide an accepting community that is needed for the defectors to succeed, it will also maintain national performance expectations.

Policy Alternative #7: Ministry of Education & Ministry of Unification - Teacher Trainings that Promote Social and Emotional Learning (SEL)

To resolve teachers’ negligence and biased attitudes towards North Korean defector students, the Ministries of Education and Unification should jointly conduct teacher training programs that foster Social and Emotional Learning (SEL) in educators. As a result, teachers may develop awareness and empathy for a defector’s backgrounds and hardships and be better equipped to address their emotional instability and educational needs. The Korean government should incentivize local teachers to do home visits of North Korean defector students and engage with their parents to raise awareness about the significance of education and persuade them to support their children’s learning. Constructing a close engagement between teachers-parents through active communication and persistent exchanges could result in more inclusive classroom environments enforced by the teachers.

Figure 4. Positive Effects of SEL Teacher Training (Created by Author)



Evaluation of Policy Alternatives: Evaluation Criteria

Criterion #1 – Cost (Weighted 1/3): This determines the cost-benefit of enacting a policy alternative. Costs would include factors such as total administrative, IT, and implementation costs. Scores will range from 1 to 10 with 1 providing the least cost-benefit and 10 offering the most cost-benefit.

Criterion #2 – Efficacy (Weighted 1/3): The efficacy criterion would seek to determine how effective the policy alternative would be in integrating North Korean defector students into South Korea’s education system. The efficacy criterion will be measured using a 1 to 10 scale system, with 1 representing the least effective and 10 being the most effective at providing education opportunities for North Korean students.

Criterion #3 – Feasibility (Weighted 1/3): Lastly, this criterion seeks to determine the political feasibility and the likelihood of bipartisan support to enact the policy solution. Feasibility will be classified according to the level of bipartisan support on a 1 to 10 ranking system. A score of 1 will represent low bipartisan support while a 10 will represent high bipartisan support.

Outcomes Matrix

	Cost: Total administrative, IT, and implementation costs 1/3 Weighted	Efficacy: Successful integration of Defector Students 1/3 Weighted	Feasibility: Bi-partisan support to enact policy solution 1/3 Weighted	Weighted Total
Alternative #1 Status Quo	7 – No additional costs but Korean economy may become affected	3 – Continuation of North Korean students’ early dropouts	3 – With continuous incoming defectors, status quo is not sustainable	4.3
Alternative #2	2 – Government benefits for TCNs	8 – TCNs would have government support for	1 – Could provoke public protest as taxpayers would	3.6

Equal Government Benefits for Both Defector Groups	would increase taxes for citizens	university tuitions and enrollment	be paying for defectors	
Alternative #3 Defector Student Loan Repayment Initiatives	2 – Substantial IT, administrative, and HR costs; risks of student default rates	6 – Broker debt would be paid off so defector students could focus on academics	3 – Policy could increase student loan default rates nationally	3.6
Alternative #4 Establishment of the Office of Inter-Korean Cooperation	4 – Substantial IT, administrative, and HR costs; ministries would have to hire additional staff too	7 – interagency collaboration would provide language mentorships, counselling, etc.	8 – Office of Inter-Korean Cooperation could develop closer relationships with other ministries	6.3
Alternative #5 Decentralization of Hanawon and Cross-Collaboration with Partners	4 – Investments needed to create additional localities; NGO partners could reduce expenses	5 – Local Hanawon centers may disagree with decision-making; Can provide Hanawon to remote areas	5 – Other local governments may not see the merit in Hanawon; NGO participation higher	4.3
Alternative #6 E-Learning Contents for North Korean Defector Students	8 – E-learning sites and databases already exist; Need to contact private education institutions	7 – Supplementary contents would be more effectively delivered; Remote areas can benefit too	9 – Infrastructure for E-learning already exists; Could foster public-private partnerships	8.0
Alternative #7 Accreditation of Alternative Schools	5 – Need to develop standardized frameworks that approve alternative schools for diplomas	8 – Accreditation would enable defector students to receive diplomas and pursue higher education	5 – Previously accredited one school; alternative schools may disagree to adhere to frameworks	6.0
Alternative # 8 Teacher Training for Social & Emotional Learning (SEL)	4 – Logistics costs (teacher manuals, lecturers from experts, etc.) would be considerable	10 – Teachers would be better equipped to address defectors' academic and emotional needs	6 – Government could reduce defectors' class aggressions; Teachers may not partake unless incentivized	6.6

Based on the criteria and the weights assigned on each one, the sixth policy alternative, "E-Learning Contents for North Korean Defector Students", represented the most optimal policy solution. It would not only be effective in delivering supplementary class materials in a more engaging manner, but also provide translations in Chinese, Vietnamese, and Mongolian for TCN students who have had limited learning opportunities in comparison to both native North Korean defectors and domestic students. The threshold for recommendations was up to the rating of 6.3. Therefore, it seems critical for the Korean government to heavily consider policy alternative eight, "Teacher Trainings for SEL", as well as policy alternative four, "Establishment of the Office of Inter-Korean Cooperation." While these two policy options scored relatively low in the cost criteria, their efficacy and feasibility exhibited high potential for practicality and public acceptance. As a result, the following policy options are recommended in chronological order:

1. *Policy Alternative #6 - E-Learning Contents for North Korean Defector Students*
2. *Policy Alternative #8 - Teacher Trainings for SEL*
3. *Policy Alternative #4 - Establishment of the Office of Inter-Korean Cooperation*

Conclusion

South Korea should no longer consider itself a 'homogenous' country. It has become an increasingly diverse nation with the continuous flow of migrant workers, foreign students, expatriates, as well as incoming North Korean refugees. Thus, for the nation to reap the benefits of the potential economic benefits and human capital that North Korean refugees may provide, social services, societal views, and education opportunities must adapt in South Korea for the long-term educational integration of North Korean defectors. Despite the country's hardships for its new arrivals, South Korea remains the most prominent host for North Korean defectors and one of the most desired destination for defectors. Thus, not only will the policies enacted for the education of North Korean defectors provide a foundation for future defectors, they may also play significant roles for future North Koreans after the reunification of the two Koreas.

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Toward a task design model for mental acceptance and motivation: a transdisciplinary approach

Bio data



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Abstract

The Erasmus+ TECOLA project (www.tecola.eu) focuses on pedagogical differentiation through telecollaboration and gamification for intercultural and content integrated language teaching. The role of the University of Antwerp as partner is the development of a task design model for telecollaboration in virtual and gamified environments.

The task design model is based on two gaps in literature on task-based language teaching (TBLT), technology-mediated TBLT and telecollaboration, which are also encountered in current pilots and exchanges in practice. The first gap is the disregard for established concepts and principles from motivation theory and psychology. Secondly, tasks are seen as products with features that may have an effect on learning, however not much is said about task design as a process.

In this presentation, we will first highlight the theoretical foundations for conceiving the task design model by presenting the models involved. We will then explain the task design model itself and how it has been presented to and used by teachers. The model itself is an evolving concept which is being tested in the Winter and Spring of 2019 in various exchange projects in Europe.

Finally, we will show that this project is an illustration of how transdisciplinarity (Colpaert, 2018) can be a better solution than interdisciplinarity, especially in cases where multiple disciplines come together: linguistics, language acquisition, technology, psychology and pedagogy.

Task-based language learning and teaching (TBLT)

Grounded on socio-cultural views on language learning, TBLT has been established for some time now as one of the main approaches to language learning and teaching worldwide (Van den Branden, 2006; Van den Branden, Bygate & Norris, 2009; Thomas & Reinders, 2010; González-Lloret & Ortega, 2014). TBLT has been identified as the most advanced form of communicative language teaching as learners are expected to act not only as language learners, but also as language users (Ellis, 2003; Van den Branden, 2006). Tasks, the smallest unit of syllabus design and evaluation, are at the centre of each rich language learning activity and they are generally structured into three stages: pre-task, in-task and post-task (Ellis, 2003; Van den Branden, 2006). For the development of the task design model, we adopted Van den Branden's (2006) definition of tasks viewed as "an activity in which a person engages in order to attain an objective, and which necessitates the use of language" (p. 4).

Challenges for TBLT

Although much is already known about TBLT, little is said about the challenges TBLT is facing. Not much has been written or researched about TBLT and collaborative learning and, consequently, about TBLT and telecollaboration. And both in literature and practice, TBLT has thus far failed to address the psychological-motivation side of tasks and tasks are seen as products, not as processes.

Collaborative learning

A first challenge for TBLT, as said before, is collaborative learning. For many years now, collaborative learning has established itself as a key concept in pedagogy. In short it is seen as a situation in which two or more people learn or attempt to learn something together (Mitnik et al., 2009). In collaborative learning, students are active participants in their own learning process and this is why, for obvious reasons, collaborative learning is used in student-centred settings (Colpaert & Gijzen, 2017).

Research shows that collaboration is beneficial for learners, and researchers agree that it should be included in the design of powerful learning environments. This is why many teachers have started exploring collaborative activities with their learners. Benefits from the teacher's point of view are fewer teacher-centered classrooms and the subsequent assumption of a reduced workload. Given the pressure many teachers are confronted with, this is an understandable rationale. When the students are working together, the teacher has time to focus time on other obligations (Colpaert & Gijzen, 2017).

However, since the learner is the point of focus of TBLT, the question that remains is: do students really want to work and learn together? The way learners experience a collaborative task, depends on a number of factors such as type of learner, flexibility of the learner and concerns related to anxiety when it comes to collaborative learning (Belz, 2002; Kramsch and Thorne, 2002; O'Dowd, 2003; O'Dowd & Ritter, 2006; Colpaert & Gijzen, 2017). The need for and the effect of collaborative learning largely depends on factors such as modality, activity type, task type, context and personal goals (Ellis, 2003; Colpaert & Gijzen, 2017).

Telecollaboration

Another challenge for TBLT is telecollaboration. In language learning contexts, telecollaboration is understood to be: "Internet-based intercultural exchange between people of different cultural/national backgrounds, set up in an institutional blended-learning context with the aim of developing both language skills and intercultural communicative competence (as defined by Byram 1997) through structured tasks" (Guth & Helm, 2011, p.42). During these exchanges learners get a chance to engage online in authentic meaningful communication with new peers from other countries. Telecollaborative exchanges, especially in innovative e-learning environments such as 3D

or virtual spaces and when using appropriate telecollaborative tasks, have the potential to facilitate interaction and collaboration, enhance language learning and intercultural communicative competences (ICC) in a technology mediated setting.

TBLT has been the prominent approach to learning and teaching in technology-mediated learning environments (Van den Branden, 2006; Van den Branden et al., 2009; Thomas & Reinders, 2010; González-Lloret & Ortega, 2014). However, although the idea of designing tasks from a task-based perspective has gained and secured widespread support with researchers all over the world, there's up-to-date not yet cogent evidence that designing technology-mediated tasks according to TBLT criteria can result in successful learning.

Research-based evidence shows that FTF tasks play an important role in successful language learning (Ellis, 2003; Samuda & Bygate, 2008) yet, we do not have enough knowledge on how tasks work in technology-mediated settings (Hampel, 2006; Doughty & Long, 2003; Wang, 2007). Additionally, there is a need to explore how tasks can be designed to fully maximize the potential of interaction in an online medium (Thomas & Reinders, 2010). Over the past two decades researchers in the field of Computer Assisted language Learning (CALL) have been increasingly interested in tasks design, but to this date TBLT and CALL have not been able to answer the question of "how to integrate new technologies and language tasks into an organic and mutually informative whole" (González-Lloret & Ortega, 2014, p.4).

Adding on to the challenge of designing tasks for technology-mediated TBLT are the fact that they need to be collaborative tasks. Up to date few studies have tried to question or criticize the acclaimed benefits of collaborative tasks when applied in the field of technology. Most evidence supporting advantages of collaborative learning stems from research that has been conducted in traditional classroom-based settings and it is by no means a valid assumption that collaborative learning in a technology-mediated setting can trigger the same results. Technology allows us to design and work with tasks in highly varied environments, but we cannot assume that tasks work in the same way as they do in the FTF classrooms (Thomas & Reinders, 2010).

Hence TBLT is, as described, potentially a suitable approach for second language learning in technology-mediated settings, but TBLT-based tasks do not necessarily create acceptance and willingness in the learner' mind. This brings us to the next challenge for TBLT: psychology.

Psychology

TBLT literature, research and practice tend to overlook the psychological-motivational characteristics of tasks, also in technology-supported settings (Poupure, 2013). In spite of teacher effort and expertise, if students are not engaged and motivated, the task (and learning altogether) will fall short (Dörnyei & Tseng, 2009). It is therefore important that tasks are designed in such a way that they elicit learners' motivation and engagement, i.e. that they are meaningful to all those involved. For telecollaborative activities to be effective, students need to be convinced that the task is meaningful to them and useful to others, i.e. their peers and teachers (Foster & Skehan, 1999; Ellis, 2009; Colpaert, 2010). For telecollaborative activity to be successful, teachers should acknowledge that there is no such thing as one task that will be meaningful to all learners involved. Hence, TBLT is in dire need of a model showing how tasks are to be designed to elicit learner motivation and engagement (e.g. by guaranteeing meaningfulness).

Task design

The last flaw in present-day TBLT literature, research and practice is that tasks are seen as products with features that may have an effect on learning, but too little is known about task design as a process of conceptualizing and specifying the best possible tasks for a specific context (Samuda & Bygate, 2008; O'Dowd & Waire, 2009). Task design is often seen as automatic and logical, which is a misconception since one of the key difficulties of

TBLT for teachers is to actually implement a task-based approach in their particular context (Ellis & Shintani, 2013).

The TECOLA project

After our international CALL Research conference on task design (Colpaert et al., 2015), the University of Antwerp embarked on the Erasmus+ TeCoLa project (www.tecola.eu) that focusses on pedagogical differentiation through telecollaboration and gamification for intercultural and content integrated language teaching. Antwerp University's role as project partner was the development of a preliminary, theoretical task design model for telecollaboration in virtual and gamified environments that closed all four above mentioned gaps in TBLT literature, research and practice. Starting points to develop and test this model are secondary school level language learning and teaching contexts in Europe. The task design model should become an inspirational methodological framework rather than a set of prescriptive guidelines.

Motivation

To close the above mentioned gaps, we focussed on the mental acceptability of the task, the learners' willingness to do the task, and their identification with the task. We built our task design model on theories such as Self-Determination Theory, Dörnyei's L2 SELF model and Colpaert's Personal Goal Theory. We also used some other theories (Expectancy Theory, Attribution Theory etc.), but these would lead us too far within the scope of this paper. In the next section, we will describe motivation on three levels: a global level, a local level and an individual level.

On a global level

The Self-Determination Theory describes motivation on a global level since it discusses three universal innate psychological needs: competence, relatedness and autonomy (Deci & Ryan, 2000) Apart from that it also presents six universal levels of regulation and identification:

- amotivation: no participation
- external regulation: passive participation because of demand, reward or punishment
- introjected regulation: participation to maintain self-esteem
- identified regulation: learner values the goal of the task
- integrated regulation: learner believes in the task
- intrinsic regulation: complete identification with the task ('this is me')

On a local level

On a local level motivation can be described in terms of personal goals. Personal goals seem to be non-conscious or unconscious volitions related to a specific learning situation. They are not linked to concrete actions, but mostly to states of mind or feelings. Personal goals are not related to life-in-general (like be happy, rich, and healthy), but they mostly spring from attitudes toward the learning situation. They are certainly individual to a large extent, they differ within a group, but it has always been possible to group them or find some kind of common denominator. A few personal goals (such as the desire to be respected) seem to be universal (Colpaert, 2010).

In cases of problematic motivation, too much direct focus or emphasis on pedagogical goals is counterproductive. It is better to first create willingness or acceptance in the learner's mind. In other words, it will prove beneficial to start with focussing on factors which stimulate or hinder the learning process in the learner's mind, before turning to what they have to acquire. These factors are the personal goals. (Colpaert, 2010).

Personal goals are design concepts derived from an abstraction of hidden factors that stimulate or hinder a group (or subgroups, personas) in the learning process. They are not necessarily psychological realities, but rather assumptions about some aspects of the user which have appeared to be of decisive importance for the design process. Personal goals are only 'real' to the extent that they contribute to the efficiency and effectiveness of the

design process in a first step, and (more indirectly) contribute to the result in terms of acceptance, learning effect, self-efficacy, interest, and motivation in a second step (Colpaert, 2010).

On an individual level

On an individual level, motivation is directed by the motivation self-system of L2 learning (Dörnyei, 2009). This motivational self-system suggests that a person has three self-images: the present self, the ideal L2 self and the ought-to L2 self. The present self is the person as he/she is as a second language speaker in that moment. The ideal L2 self is a person's imagined ideal future self as a second language speaker. This ideal L2 self can promote motivation by pushing the present self to strive to become the ideal self, which will be done by integrative and internalized motivation in language learning. The ought-to L2 self includes the things a person believes they should do/have in order to meet expectations or avoid negative outcomes, which is associated with extrinsic motivation (Dörnyei, 2009).

The task design model

As indicated before, TBLT is facing the challenges of (tele)collaboration and psychology/the learners' mental acceptance of the task. Apart from that, although TBLT criteria have been widely accepted to guide teachers through their process of task specification (or shaping), they do not say anything about task design, meaning the process of conceiving a task concept or idea. Tasks keep falling from the sky. With our task design model, we try to close both gaps in the knowledge about TBLT, while facing the challenges of designing tasks for (tele)collaboration.

The task design model itself is an evolving concept which will be tested in the Spring of 2019 in various exchange projects in Europe. The model has already gone through extensive changes based on the feedback of TECOLA partners; 100 students in teacher education at the University of Antwerp (September 2017 - January 2018); 200 participants at conference presentations (CALICO 2017, CALL 2017, DFLL 2017 in Taiwan, PP-TELL 2018 in Taiwan, WorldCALL 2018 in Chile...); 85 participants at Teacher Training events organized at Ghent University, Mons University and Antwerp University in January 2017 ,and the teachers we are coaching in the TeCoLa project.

The task design model right now has the form of a questionnaire which should help teachers in conceptualizing and specifying more activating tasks on the one hand, and in gathering and analyzing data on the other. The questionnaire is divided into four categories: pedagogical approach, activity type, psychology and autonomy. For each category, between four and eight questions are asked to help the task designer work out said category.

Pedagogical approach

The part about the pedagogical approach poses questions about targeted competences and required knowledge, skills, insight and attitude. An example question from the questionnaire is: "Does the task target more than knowledge and skills?".

Activity type

The part about the activity type tries to identify which of the following four types of activities are being used:

- Tell: this activity is just communicating without any expected nor observable task outcome. It's just about the activity itself. Present yourself, your school, your country... This task is not necessarily strongly bidirectional.
- Interact: this activity is to do something with words with no tangible, measurable or describable task outcome but with possible (desirable) effect on the other person such as in the case of negotiating, convincing, The effect is that the other person is convinced, has made a concession, has come up with a new idea ... This kind of tasks is more strongly bidirectional.

- Do: this activity leads to a real outcome in terms of observable phenomena (e.g. typical TBLT tasks such as go and buy something, play a game ...).
- Make: this activity leads to an artefact, mostly non-physical in the case of telecollaboration (exception activities with 3D printer?).
-

No outcome type is more valuable than the other. All depends on what is needed in a specific context. But our hypothesis is that the more challenging the context (e.g. the lower the motivation), the more reason for choosing "do" and even "make" types. An example question from the questionnaire is: "Does the task require making something?".

Psychology fit

The part about the psychology is divided into three qualities and three levels, and helps the task designer to make the task as meaningful as possible. The qualities and levels are the following:

- three qualities:
 - meaningful: a task can be more authentic, acceptable and relevant
 - useful: a task can have an additional result for learner, learning environment or others
 - rewarding [advanced level only]: a task can address universal needs (competence, relatedness, autonomy), personal goals (respect, support, ...) or Ideal Self Images
- three levels (based on the research presented in the part about motivation):
 - global or universal: what we know learners worldwide want
 - local or context-dependent: what we know 'our' learners want
 - individual: what we know some learner want
 -

An example question from the questionnaire is: "Does the task represent a real world activity?".

Task autonomy

The last part of the questionnaire, about autonomy, determines the degree of freedom for the learner:

- Fixed task: tasks should be executed as such
- Task with degrees of freedom: learners can/should make some choices
- Negotiated task: learners discuss the task among themselves, with the teacher or with the other class and suggest changes
- Designed task: learners design a task themselves

This axis not only represents degrees of freedom for the learner, but also increasing importance of the pre-task discussion. On the lowest level, learners will probably first vent their reactions before actually starting to execute the task. The higher the level, the more complex and interesting this pre-task execution stage becomes. It is hypothesized that the pre-task discussion will be more interesting than the in-task discussion.

The four types of task autonomy represent dimensions of task complexity but also potential activating power. Their purpose is not to have all 'levels' combined into one task, nor to prototype tasks on all levels. Within the TeCoLa project, partners and teachers should start with the simple straightforward task-as-is and then gradually evolve towards more complex tasks, in whatever order. An example question from the questionnaire is: "Will the task description leave some options for the students?".

Research-based: transdisciplinarity

As said before, the TeCoLa-project, telecollaboration and our task design model can be located within the scope of Computer-Assisted Language Learning. CALL has a multidisciplinary character; it can be located within multiple disciplines: linguistics, technology, pedagogy, psychology, design and research.

When different people from the CALL field work together, this can be viewed as interdisciplinarity, which involves the combining of two or more academic disciplines into

one activity. However, interdisciplinarity only occurs on one side, not on both. The more disciplines are involved, the weaker the model.

Therefore, Colpaert (2018) proposes a better solution than interdisciplinarity in cases like the TeCoLa project, where multiple disciplines come together (e.g. linguistics, language acquisition, technology, psychology and pedagogy). In this new approach, two levels are being distinguished: the activity level and the conceptual level. The activity level is the level where researchers and actors normally work in their own habitat. The conceptual level is the level where they create new knowledge constructs together, hereby transcending the boundaries between them. These constructs can then be instantiated back on the activity level as concrete discipline- or actor-specific notions.

Rather than talking about interdisciplinarity, Colpaert suggests talking about transdisciplinarity, which is an activity that stands for a new way of thinking. The activity consist in the co-construction (conceptualization and specification) of mental artefacts or knowledge constructs on a higher level of abstraction. These constructs can be models, concepts, objects, methods, metaphors, images and even frameworks. The activity consist in crossing boundaries between disciplines (linguistics, pedagogy, psychology, technology, sociology...).

CALL as a discipline should be transdisciplinary in essence: this is the only way to build its own knowledge base, theory, language and identity. It is also the only way to respect and integrate findings from psychology and motivation theory

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Using mobile technology to help visual impairment students

Bio data



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Abstract

The aim of this study is to examine the use of mobile technology for supporting E-Learning of Visual Impairment students in the governmental schools, primary stage. For this purpose; certain APPS were adapted, other was created to help such students. 14 students were selected randomly and applied upon. The findings of the study revealed that using Mobile Technology raised the students listening and reading skills achievements also raised their self- esteem.

Conference paper

Introduction

The Importance of using technology in the educational process of students with disabilities was discussed throughout many articles around the world. Nowadays, Egypt started to focus on such topic and take into account such students after long neglecting. Supporting E-Learning for visual impaired students has become life time opportunities to the most neglected students in classrooms in Egypt in order to raise their self- esteem and start living normally also learning a new language with its skills.

Researches show that the same principles of teaching English to normal students that appear in curriculum are valid for teaching students with disabilities; yet, language instruction to the disabled students is more effective when teachers start to:

- Create a language- rich environment
- Adjust teaching to the individual pace of each student
- Break down the learning into sub- tasks in keeping with students needs
- Provide extensive drilling, memorization and repetition of the learning material

From such principles came the idea of using Mobile Technology. To motivate students, teachers and parents use the apps created; apps needed to be simple, clear, and most of all free to download, also, available to the students at schools and homes offline. For such reasons, the researcher integrated it into the students' individual education plan at every stage, presentation, assessment, implementation and evaluation.

The importance of using educational computer software to teach Visual disabled children can be attributed to a number of reasons, including:

- Educational computer software offers a feature of interaction that provides better educational experiences and more activities; they minimize the effect of isolation of which the visual impairment students suffer. As a result, such software creates opportunities for interaction between the learner and the software.
- Educational software, especially individualized instruction, considers individual differences among the learners so that each student will master the material, as the software designed for the Visual impairment students (in terms of self-learning) provides them with an opportunity to control and follow up the presentation time and to repeat it according to their needs
- Educational software offers the feature of variation since they are composed of various elements such as sound, animation, pictures etc. which will increase the visual impairment students' ability to deal with them.
- Educational computerized software addresses the visual senses due to containing pictures, drawings and texts. In addition, they address the sense of sight, touch and smell by using the virtual status technology, then making use of the other senses to learn the material.

As a result for the various uses and benefits of computers, Mobiles and technology, the researchers sought to teach English to visual impairment students in the elementary stage through technology software in an attempt to improve learning the skills of reading and listening in English at the beginning of their education.

Problem of the study

Visual Impairment students communicate with the others normally as if they were normal through they need a lot of attention and special and various methods to be taught with. Such methods requires a specialized, patient and a capable teacher who can teach Visual Impairment children according to their pace and needs

In this regard, the importance of this study stems from our attempt to search for new and developed means to teach disabled children in such a way that helps in improving their quality of learning and raising its efficacy. It also updates this group of children with the current rapid developments that may help make them more knowledgeable about the community and allow them to enjoy the latest developments.

All of the above has urged the researchers to implement this research on the efficiency of Mobile and computer software in teaching visual impairment children the skills of reading and listening in English.- an experimental study for the elementary stage in the Tanta, Egypt. This method relies on using Mobile app as software to learn reading and listening in order to save effort and time.

Hypothesis of the study

The study set out a group of hypotheses that are relevant to the nature of the research. It uses the experimental methodology based on an experimental group to measure the efficiency of using Mobile app in teaching visual impairment students the skills of reading and listening in English. The hypotheses are as follows:

- There are no significant statistical differences between the means of the scores of both pre- post tests in the reading achievement test.
- There are no significant statistical differences between the means of the scores of both pre- post tests in the listening achievement test.
- There are no significant statistical differences between the means of the scores of both pre- post scales in the self-esteem scale.

Methodology and procedures

Sample of the study

The sample was chosen from Ali Mobark primary school, Tanta, Egypt. Then the program was applied to a sample consisting of 19 Visual impairment students of the second grade, five of them were excluded as they didn't want to complete using the app, who were studying the English language course during the First month of the second academic semester of the academic year 2018-2019.

Instruments of the study

- The Mobile app, software and books of the academic year so as to become compatible with self-learning.
- Mobile educational software that was prepared and developed by the researcher and an It designer and other computer programs to make use of them in teaching the Visual impairment students.
- The achievement tests that were prepared by the researcher to measure achievement in the skills of English reading and Listening.
- Self- esteem scale that were prepared and developed by the researcher to measure the improvement of the Visual impairment students' self- esteem.

The results showed that the abilities of visual impairment students who learn by Mobile app are better than learn by the traditional method. In addition, the results showed that using Mobiles in the tests helps to minimize worries and concerns from the tests that take a traditional form.

Moreover, the results confirmed improvement for the benefit of Visual impairment students who learn by Mobile app and due to the visual feedback, which plays a significant role in such improvement in learning and raising their self- esteem. This was noted by the researcher and was mentioned in the results, as this study confirmed raising the efficiency of learning and training by Mobile Technology.

Results of the first hypothesis

In testing the first research hypothesis that states,; there are no significant statistical differences between the means of the scores of both pre- post tests in the reading achievement test. By referring to Table 1 and 2, the researcher obtained the following results as shown in the table from the statistical tests.

Group	No. of Participants	Means	SD	t. value	Sig	Sig.(2.tailed)
Experimental	14	8.79	.893	15.74	0.276	0.00
Control	14	15.57	1.342			

Table (1) results of T- Test for the first hypothesis

Group	No. of Participants	Means	SD	t. value	Sig	Sig.(2.tailed)
Experimental pre	14	10.00	1.284	16.237	0.034	0.00
Experimental post	14	15.57				

Table (2) results of T- Test for the first hypothesis

Table 1 confirms that there is a significant statistical difference between the two groups (Control and Experimental) in the post test due to the progress of the participants from the experimental group who learned by using the Mobile Technology and computers software compared with the control group who learned by the traditional method.

Table 2 confirms that there is a significant statistical difference between the (pre and post) in the post test due to the progress of the participants from the experimental group who

learned by using the Mobile Technology and computers software compared with the control group who learned by the traditional method.

Results of the second hypothesis

In testing the first research hypothesis that states,,: There are no significant statistical differences between the means of the scores of both pre- post tests in the listening achievement test. By referring to Table 3 and 4, the researcher obtained the following results as shown in the table from the statistical tests.

Group	No. of Participants	Means	SD	Freedom Degree	t. value	Sig	Sig.(2.tailed)
Experimental	14	8.50	1.95	26	11.574	0.308	0.00
Control	14	16.29	1.59	24.98			

Table (3) results of T- Test for the second hypothesis

Group	No. of Participants	Means	SD	t. value	Sig	Sig.(2.tailed)
Experimental pre	14	9.50	1.562	16.427	0.059	0.00
Experimental post	14	16.36				

Table (4) results of T- Test for the second hypothesis

Table 3 confirms that there is a significant statistical difference between the two groups (Control and Experimental) in the post test due to the progress of the participants from the experimental group who learned by using the Mobile Technology and computers software compared with the control group who learned by the traditional method.

Table 4 confirms that there is a significant statistical difference between the (pre and post) in the post test due to the progress of the participants from the experimental group who learned by using the Mobile Technology and computers software compared with the control group who learned by the traditional method.

Results of the Third hypothesis

In testing the first research hypothesis that states,,: There are no significant statistical differences between the means of the scores of both pre- post scales in the self-esteem scale. By referring to Table 5 and 6, the researcher obtained the following results as shown in the table from the statistical tests.

Group	No. of Participants	Means	SD	t. value	Sig	Sig.(2.tailed)
Experimental	14	9.93	1.81	11.462	0.133	0.00
Control	14	16.71	1.26			

Table (5) results of T- Test for the third hypothesis

Group	No. of Participants	Means	SD	t. value	Sig	Sig.(2.tailed)
Experimental pre	14	8.64	1.385	21.809	0.422	0.00
Experimental post	14	16.71				

Table (6) results of T- Test for the third hypothesis

Table 5 confirms that there is a significant statistical difference between the two groups (Control and Experimental) in the post test due to the progress of the participants from the experimental group who learned by using the Mobile Technology and computers software compared with the control group who learned by the traditional method.

Table 6 confirms that there is a significant statistical difference between the (pre and post) in the post test due to the progress of the participants from the experimental group who learned by using the Mobile Technology and computers software compared with the control group who learned by the traditional method.

Summary and discussion

The results showed that the abilities of Visual impairment students who learn by computer are better than the Visual impairment students who learn by the traditional method. In addition, the results showed that using computers in the tests helps to minimize worries and concerns from the tests that take a traditional form. Moreover, the results confirmed improvement for the benefit of Visual impairment students who learn by computer software and due to the visual feedback, which plays a significant role in such improvement in learning. This study confirmed raising the efficiency of learning and training by computer software.

Recommendations

- Have access to the international trends and recommendations regarding the dual language instruction.
- Prepare and qualify specialized teachers in English for the Visual impairment and expose them to training courses in using Mobiles technology and computers in the English curriculum.
- Due to the spread of computers and multimedia software in large quantities, the researcher would suggest encouraging and developing self-learning by using computers through adopting appropriate computer software that is specially designed for the Visual impairment students and extend them to the audio impairment students by the educational institutions. This will enable the special disabled students to use them in self-learning and practice it at home.
- Among the most important motivations of this research is extending teaching the use of the technology to the deaf students, as that will open various fields for them in continuing education and self-learning. Currently, English is the universal language for communication and self-learning through the world web.
- To apply the same research on other syllabuses and curriculums to examine the efficiency of learning with the help of computers.

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The usefulness of Icelandic Online: Motivational factors and student retention

Bio data



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Abstract

This paper presents an analysis of tracking and survey data collected over eight years on 400 users on one of seven courses on *Icelandic Online (IOL)*, *IOL 2*; an open curated online program in Icelandic as a second/foreign language. The IOL 2 program offers three identical courses, which are provided in three different modes of delivery: blended, distance, and open self-directed mode. The study examines whether certain course-related and other motivational factors have an impact on student retention, the factors are, (a) the initial goal to complete a course and (b) tutor-specific factors provided in the tutorial modes, and also (c) self-reported personal motives that drive learners towards completing the course. The findings reveal that intent to complete is a significant predictor of course completion and that most of the users' report that tutor-specific factors were important in motivating them to carry on with the course. Furthermore, the results show that course-completers attend the course with different motives and have diverse reasons for completing.

Conference paper

The free and open access to the *Icelandic Online (IOL)* program has attracted a highly diverse group of learners from all over the world, which created challenges for course developers and CALL researchers. Approximately 200,000 have enrolled in one or more of the seven courses of IOL during the period under investigation. Simultaneously, this educational resource has contributed valuable data and provided information about the

learners, usability and usefulness of the program for learners. The use of Learning Analytics provides a useful means to analyze these learner-produced data and give insight into the factors that may affect retention (Long & Siemens, 2011). The ultimate goal of the analysis is to improve the learning environment.

This study focuses on some of the many factors that may influence engagement and retention of online learners. Researchers have argued that variant course-related and motivational factors may affect retention in MOOCs (Massive Open Online Courses) and call for more data on the impact of specific factors. Reich (2014) and El Said (2017) highlight the significance of considering a student's initial goal in the discussion on retention in MOOCs. Others (de Freitas, Morgan, & Gibson, 2015) have questioned the quality of the online learning environment and pointed out the need for new engagement strategies for online learners and more structured support (Teixeira & Mota, 2014) in order to improve retention. We also need to understand better how different motivations that the highly diverse target group on MOOCs may bring with them contribute to student engagement (de Barba, Kennedy, & Ainley, 2016).

The study presented here is the second phase of a three-tiered mixed method study and follows-up previous findings that drew on tracking data from 43,000 learners on overall retention and online behavior on all seven courses on *IOL* over eight years (Friðriksdóttir, 2018). The findings revealed overall low completion rates and that the blended mode is more effective in retaining learners than the other modes. Regular attrition patterns across all modes were identified with sharp drop-outs initially and concentrations of drop-outs at certain junctures in the courses. These findings called for a more in-depth study of why students decide to stay on or leave the *IOL* program and as to why the blended learning mode is more effective than the other modes in retaining students. Guided by the previous findings, this survey research attempts to investigate why the blended learning mode is more effective in retaining students than the other modes and what factors may influence students' motivation to stay in the course.

A survey was sent out to the group of students whose behavior online had been tracked in order to investigate the impact of certain mode-specific factors on student retention in the three different modes of delivery. Participants in the survey are learners (N = 400) who enrolled in *IOL 2* from 2010-2018. This is a lower intermediate course delivered in three different modalities, a) as an open self-directed, free non-tutorial, non-credential course without time limits; b) a distance learning eight-week non-credential diploma course with a fee and an online tutor with an option to take a final online exam; and c) as a blended learning 13-week course which is integrated into a credit-bearing on-campus course at the University of Iceland (10 ECTS), with an annual registration fee where they have the option to interact with a tutor face-to-face or via email. Population in the study is diverse, 63% come from eleven countries: Germany, the USA, the Philippines, the UK, France, Canada, Poland, Denmark, Sweden, Russia, Italy, and Switzerland; with the rest scattered across the world.

The questionnaire focuses on the principles that provide the pedagogical foundation for each of the three different modes of delivery on *IOL 2*, allowing exploration and comparison of the effect of certain mode-specific content and presentation factors on retention. The main goal of the survey is to explore whether experimental variables are predictive of the extent to which learners engaged with the course. The investigation is aimed at learners who had covered more than 15% of the course content on each of the three modes of delivery, thus excluding those who withdrew very early. Different categories of experience were examined in terms of mode-specific factors in the two tutorial modes, that is, experiences related to a) private interaction with the tutor, b) tutor support overall during the course, c) detailed introduction of the program, and d) set syllabus where course content is pre-organized into timetabled manageable sections. Two additional categories of experiences and motives were also considered in terms of all participants, that is, a) student initial goal in terms of engagement, and b) student self-reported reason for completing the course.

The results show that most of the learners in the two tutorial modes reported the variant tutor-related factors in the course important for their motivation to continue with the course and that these factors have a significant impact on retention in the blended mode. Significant differences in retention were also identified between learners who had the initial goal to complete the course and those who did not have such a goal. Finally, the results illuminate that course-completers are driven by various motives towards completing, such as course satisfaction and the desire to master the target language, where the blended learners are mainly driven by the goal of earning credentials.

The third phase of this study, which is another follow-up study, also based on tracking data, survey data and descriptive data, will explore the influence of content factors on student retention.

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Using mobile apps to develop L2 speaking: an ecological perspective

Bio data

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Abstract

Most MALL research has concerned the effectiveness of using mobile technologies for language learning, the users' perceptions and attitudes, and the using patterns. Detailed investigation of the learning process of MALL is scarce. From a socio-cultural ecological perspective, this research aims to explore how the learning of L2 speaking occurs with mobile apps and the learning ecology around it. This case study collected data from three overseas pre-Master students for five weeks. Eleven learning instances of L2 speaking with mobile apps were identified. Data were analysed according to the proposed learning ecology framework. The results indicated a complex and dynamic ecology of learning in MALL, i.e. active learner engagement, facilitative speaking practices, and flexible learning contexts. Implications for future research and theorising about MALL were also discussed.

Conference paper

Introduction

The mobile technologies that can be used anytime, anyplace are particularly suitable for language learning, which is voice/audio based interaction and often takes place in informal settings (Kukulska-Hulme, 2012). Numerous stand-alone mobile apps have been developed to support different aspects of second language learning, including speaking, which is considered as a fundamental skill. Although research on MALL has burgeoned in the last two decades, only a small number of studies have investigated the learning process in detail. van Lier (2004, p. 21) argued that "ecology and sociocultural theory (SCT) share a number of important features". The ecological perspective of language and language learning does not deny the central role of a cognitive process (van Lier, 2000, p. 251), but transcends the cognitive-social debate (Blin, 2016). From the sociocultural and ecological perspectives, this study aims to explore the learning ecology of self-regulated language learners with mobile apps. The research questions were 1) what are the things learners do when using mobile apps to develop L2 speaking; 2) in what contexts do learners use the apps; and 3) how the L2 learning is facilitated in the contexts of MALL.

Socio-cultural ecological approach to mobile learning

In recognition of the complexity and dynamic nature of mobile learning, Pachler and his colleagues have proposed a conceptual framework of a socio-cultural ecology of mobile

learning (Pachler, Bachmair, & Cook, 2010). The conceptual framework focuses on the sociocultural conditions of learning in the context of mass media development from an educational perspective. The framework consists of three interrelated components, namely the agency of media users/learners, cultural practices, and sociocultural structures. Firstly, "agency" stands for the user's capacity to deal with and make an impact on the world (Pachler, 2010, p. 159). It takes account of the learner's capacity to construct his/her life-world and make meaning via media use, representing the learner's semiotic and social capacity. Agency also links to the learner's own purpose of using mobile devices for meaning-making, the process of which is defined as learning by learners themselves. During this process, learners consciously or unconsciously develop requisite skills in, for instance, searching and evaluating information. Secondly, "cultural practices" refer to routines in relatively stable situations such as pedagogical practices in formal educational settings and media use in daily life (Pachler, 2010, p. 160). Finally, as an important contextual characteristic of mobile learning, "structures" relate to the sociocultural and technological structures that govern learner's being in the world (Pachler, 2010, p. 161). The changing structures of mass communication enable learners' diverse relationships with their physical spaces and places endowed with meaning. By using mobile devices knowledge and information can be obtained across locations, time, people, communities, and social settings, therefore learning occurs (Pachler, Bachmair, & Cook, 2013). In the following sections, the three components are instantiated to situate the context of using mobile apps to develop L2 speaking.

Learner agency

The language learner component reflects the learner's capacity to deal with language learning and to make an impact on his/her own learning with mobile apps. Firstly, learners selected learning apps based on their own needs and interests. In a case study of four Japanese university students using smartphone apps to learn English, the learners selected different apps for different purposes, namely content apps for accessing to information and social networking apps for communication (Mindog, 2016). Secondly, learners designed their own ways of using the selected apps. Drawing on the mediation theory embedded in SCT, Ma's (2017) multi-case study explored 10 Hong Kong university students' out-of-class informal language learning with mobile technologies. The results showed that students designed their diverse and personalized learning procedures. For instance, one participant used smartphones to watch American TV series every night before falling asleep. He believed movie watching could help him improve oral skills, particularly pronunciation. Another example is watching YouTube channel which taught English in a series of funny short stories. Finally, learners also evaluated the selected apps and content in the above-mentioned learning processes.

App-enabled contexts

Mobile apps-enabled contexts indicate the sociocultural and technological structures that influence the learner and his/her language learning practices. The multi-functional mobile devices and various apps supply varied educational affordances for language learning. Also, by using mobile apps, language learning occurs through and across locations, time, people, and social constellation, representing the intrinsic feature of MALL with mobile apps, i.e. mobility. In research on the user experience of an automatic speech recognition (ASR) embedded mobile app, the app features improved learners' speaking opportunities (Ahn & Lee, 2016). The recording function encouraged students to speak and practice learning materials several times. The ASR feature responded to the student's utterances and gave feedback immediately. Based on the responses, students can monitor their pronunciation and correct errors. Also, ASR enabled the interaction between the learner and the device. In the role play tasks, students felt like they were talking with a real foreigner, which increased their motivation in language learning and confidence in speaking (Ahn & Lee, 2016). Moreover, through mobile technologies students could collaborate with other agents, i.e. peers, teachers, parents or relatives, when doing teamwork (Ma, 2017). Last but not least, with smartphones students could use these functions in private spaces to avoid language anxiety and losing face, which provides a safe environment (Ahn & Lee, 2016).

L2 learning practices

L2 learning practices refer to the things learners do with mobile apps for specific language learning goals. It mainly focuses on L2 learning conditions and speech production. Research on SLA has formulated several hypotheses about ideal conditions for language learning (Ellis, 2008). The most acknowledged conditions for L2 learning to take place include comprehensible input (Krashen, 1981, 1985), negotiation of meaning in interaction (Gass, 1997), comprehensible output (Swain, 1985), and noticing of new language that can be promoted through appropriate feedback (Ellis, 2005). In terms of speech production, Levelt (1989) proposed four principal processes, namely conceptualisation, formulation, articulation, and self-monitoring. Conceptualisation deals with the generation of the message. Starting with an idea, the 'conceptualiser' draws on knowledge about the topic, situation, and discourse patterns. The pre-verbal message then comes to the formulation process. The 'formulator' gives language form to the idea through grammatical and phonological encoding. Nevertheless, the idea is still 'internal speech' until it passes through the articulation process which involves the articulatory organs to produce external speech. Self-monitoring enables language users to identify and self-correct mistakes. In a study of out-of-class language learning experiences with technology, learners made conscious effort to jot down and review the notes and tried to memorize the language points (Lai, Hu, & Lyu, 2018). This is an example of 'focus on form', showing that the student paid attention to the language point, which would contribute to the formulation process of speech production.

A learning ecology framework for MALL with apps

A framework for analysing the use of mobile apps to develop L2 speaking was proposed (see the Figure). The three key components were instantiated and adapted from the socio-cultural ecological approach to mobile learning. Based on the above literature review and the themes emerged from the empirical data, each component was conceptualized into three elements.

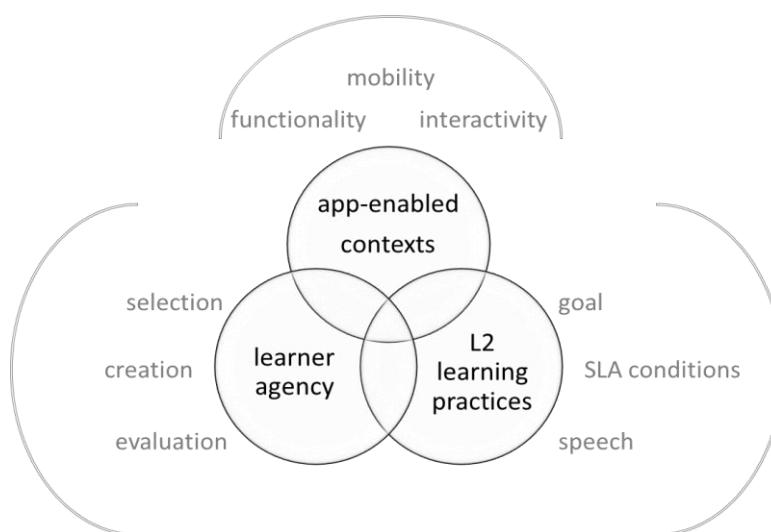


Figure: A learning ecology framework for MALL with apps

Methods

The participants of this study were three overseas students (L1 Chinese, L2 English) enrolled at a UK university during summer 2017. They were taking the 8-week pre-sessional language course preparing for MA study. The participants were all female, aged at 22 or 23. They took part in the research for five weeks. This study employed a qualitative case study methodology. The three learners could use any mobile apps for learning English speaking in their preferred ways. As a group, we met every week for approximately one hour to share their learning experiences. The details of learner's use of mobile apps to develop L2 speaking were mainly elicited from the group interviews, observations, and think-aloud protocol. Learner's app use diary in addition to screenshots and photos were

also collected as a supplement to the learning happened in their own life world. Data were initially analysed for each learner to identify learning cases. Based on the literature review and the emerging themes from the initial data analysis, the nine elements in the proposed learning ecology framework were identified, both deductively and inductively, and used as provisional codes when coding the data. Then, the ecology of the learner in each learning case was thematically analysed according to the learning ecology framework.

Results and Discussion

All of the three participants reported to regularly use language learning apps, although only two of them managed to keep a daily app use record. In total, forty learning cases were either logged by the participants or identified from the data analysis. Each learning case comprised a specific learner using a specific app(s) for an identifiable purpose(s). Among them, eleven of the more detailed and representative cases were selected for discussion here (as listed in the Table).

Table: Selected learning cases

Case	Learner	App	Learning	Week
1	Mary	IELTS Bro	IELTS speaking	1
2	Mary	Fun Dubbing	pronunciation and intonation	2
3	Mary	Daily English Listening	BBC six minute English	2
4	Mary	Daily English Listening	BBC News	3
5	Wendy	IELTS Bro	IELTS speaking	1
6	Wendy	VOA Special English	cultural topics	2
7	Wendy	Youku	idioms	4
8	Joyce	Daily English Listening	radio programmes	3
9	Joyce	WeChat public account QingClass TED and Daily English	pronunciation and daily conversation	4
10	Joyce	Listening	ideas for speaking	4
11	Joyce	TED	presentation skills	5

Active learner engagement

Throughout the learning processes, the three learners actively engaged in selecting apps and the learning content, creating learning procedures, and evaluating the selected apps and learning content in addition to their own speaking performance. In the beginning, all the three learners decided to use IELTS Bro app to practice IELTS speaking. Later, each learner started to use other apps which she believed more useful for her needs. For example, Mary selected a dubbing app to practice pronunciation and intonation (case 2). Wendy used VOA Special English and Youku app to be familiar with the target culture and idioms (case 6, 7). Joyce preferred to use TED and Daily English Listening to collect topics that she could use in her speaking (case 10). It is worth noting that the app, Daily English Listening, which seemed to be an instance of just listening, was highly valued by the learners thanks to its affordances for speaking practices.

While using the selected apps, the learners creatively designed learning procedures to fulfil their own needs. Taking Mary's case 1 as an example, instead of trying to answer the speaking test questions straightaway, she listened to other learners' speech recordings firstly. From the top three ranked speech recordings, she selected some useful phrases and vocabulary, and inspiring ideas for her own speech. She used the recording function of her smartphone to record her speech in order to check her own performance. However, using the same app, Wendy picked up a topic and recorded her speech (case 5). Then, she sent it to her friend, who was an English teacher. Later, they had a video call via WeChat and her friend pretended to be the IELTS speaking interviewer to ask some questions and gave some feedback on her speaking performance.

The learners constantly evaluated the apps and learning content. Mary and Joyce both considered that the Daily English Listening as a very good app because of its rich learning

materials and the functions of recording and automatic speech recognition (case 3, 4, 8, 10). In terms of self-evaluation of speaking performance, Joyce shared that she was happy with her mock presentation in the pre-session course because she successfully used the presentation skills that she acquired from TED talks (case 11).

Facilitative speaking practices

Strategically or not, the learners were all seeking facilitative language learning conditions, such as comprehensible input, comprehensible output, focusing on forms or meaning, repeated practice, and feedback. All the learning materials that the learners chose were something they were interested in and at a proper level for their language proficiency. They focused on forms and/or meaning when learning vocabulary, phrases, and idioms. When practicing for pronunciation, they spent a longer time to repeat until they were satisfied with the scores given by the app, e.g. Mary in case 2. In their daily life, the learners also managed to use the language that they learned from the apps. One interesting example of Wendy was that she used the idioms she learned from Youku when chatting with her native flatmates (case 7). Her flatmates understood and laughed out, thus Wendy produced comprehensible output and received positive feedback.

To improve the fluency, accuracy, and complexity of their speech production, evidence was identified to support the learners' conceptualization, formulation, and articulation. Firstly, listening to BBC news, cultural topics, radio programmes, and TED talks were all beneficial for the learners to collect ideas and get familiar with the topics (case 4, 6, 8, 10). Secondly, excerpting some phrases, vocabulary, and sentences from the learning content helped the learners to formulate their own sentences in speaking (case 1, 3, 5, 6, 7, 9). Finally, pronunciation and intonation were one of the main learning goals in terms of speaking learning. Mary and Wendy wanted to be as native-like as possible, so they mimicked the native speakers' speaking samples in the apps (case 2, 3, 6). Joyce practiced pronunciation by using WeChat public account, QingClass (case 9).

Flexible learning contexts

Mobile apps enabled learners to generate dynamic learning contexts, physically, socially, and technologically. Learning anytime/anywhere was one of the key features of mobile learning. As far as speaking was concerned, most learning instances happened in the learners' accommodation, where was quiet and free to speak aloud. One exception was when Mary used the app in the university lobby. She said that she just wanted to practice her speaking after the group meeting. She was motivated in the group meeting and could not wait to use the app. The symbolic context affected her cultural practices. Nevertheless, she found a "corner" to practice speaking. A private space was generated in the public area. Wendy often used the apps for about forty minutes after dinner. She thought it was a good time to gain some knowledge. Joyce used her apps for about one hour each time. Mary usually used the apps for ten to thirty minutes between 6 to 8 pm and around 11 pm. One might assume that it was after dinner and before bedtime. In fact, she said, "always after I go back from university and also finish my homework". When to use the apps was decided by social situations rather than simply the time. The situations were related to either university or life events, such as courses, homework, or dinner.

Although the learners used apps individually, interaction with others was never absent. Mary evaluated and excerpted ideas and phrases from other app users who shared their speaking recordings in the IELTS Bro app (case 1). She also shared her own speaking once. Joyce could record her speaking and send it to the WeChat public account QingClass. If the teacher had time, he would give feedback to some students (case 9). When Wendy showed me how she practiced speaking with the Youku app, I observed that she repeated after the teacher in the video lesson and even replied goodbye to the teacher on the screen (case 7). In addition to the interaction with other users and teachers via the apps, the learners also created opportunities to interact with people around them in their life world. One example was Wendy chatting with her flatmates as mentioned above. Another example was that Joyce joined in the discussion with her classmates and spoke on the topics she learned from the apps (case 10). The app itself also played an important role as the

interlocutor when the learners received feedback from it thanks to the automatic speech recognition function.

Last but not least, the recording function was essential to the learners' speaking practices. They could either self-evaluated their speaking recordings or send them to others. When practicing for the IELTS speaking test, Mary creatively used the recording function to generate a test-feeling situation. "You know I sense there's a big difference when I speak just naturally and when I just put the button here and record it. I just regard it as the interviewer standing in front of me. And yeah, just imagine such kind of situation that you're in the exam room, so that will make me feel quite relaxed if I take the IELTS test in the future." said Mary (case 1). Her smartphone acted as an imagined interviewer in this situation, which helped her to be familiar with the sociolinguistic knowledge of the test context and get used to and/or reduced her nervousness.

Conclusion

From a socio-cultural ecological perspective, this paper proposed an analytical framework for the ecology of using mobile apps to develop L2 speaking. As an attempt at theory instantiation, ensemble, and synthesis (Hubbard & Levy, 2016), the framework has been constructed eclectically from fields of mobile learning, SLA, and speech production. The findings indicated a complex and dynamic learning ecology of MALL. Mobile apps enabled new habitus of language learning. Selection, creation, and evaluation happened throughout the learners' app use for L2 speaking. Learners' capacity to act on and deal with L2 learning practices was constructed in the interaction with the selected mobile apps and the contexts it enabled. Benefiting from the functionality, connectivity, and mobility of mobile apps, learners generated positive learning conditions for speech production. The learning practices of L2 speaking became dynamic when learners made full use of the educational affordances of mobile technologies. Contexts that facilitated language learning emerged while learners engaged in her L2 learning practices. Future research would focus on the interaction between the ecological elements. The framework is also adaptable for analysing the ecology of learner using mobile technologies for developing other language skills, i.e. listening, reading, and writing.

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Epistemic development in small groups in a task-based and mobile-assisted language learning classroom

Bio data



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Abstract

To understand how learning unfolds, the study examines nine EFL adolescents' interactional process in a mobile-assisted collaborative learning context. In the two-month period, the participants were asked to work in groups of three to explore two topics by using their tablet PCs. The participants' in-class interactions, weekly journals, and interviews were collected. The results showed that the participants followed a circular pattern starting with the emergence of problems, the identification of focus, or the sharing of knowledge regarding epistemic development. Then, interactions aiming at generating, elaborating, and negotiating ideas followed. The pattern helped facilitate the development and maintenance of collaborative learning.

Conference paper

Introduction

From the early 1960s on, technological advances have brought up new opportunities as well as challenges for learners and teachers alike in terms of language learning (Levy, 1997). In particular, technology has been described to widen opportunities for interaction, communication, and collaboration, all of which play a crucial role in language learning from the perspective of sociocultural theories (Chapelle, 2013).

More recently, the popularity of mobile devices and common access to Wi-Fi connections create more dynamic language learning experiences compared with the use of computers. In the field of mobile-assisted language learning (MALL), review articles have revealed that the majority of MALL implementations took a teacher-centered pedagogical approach (Burston, 2014a, 2014b; Kukulska-Hulme & Shield, 2008). However, considering the affordances that mobile devices could offer, including portability and connectivity, scholars

have suggested that mobile devices should be used to support learner-centered and task-based learning (Burstion, 2014a, 2014b).

In the existing literature of mobile-assisted TBLT studies, a large proportion of them discuss the design of mobile learning systems and the systems' effectiveness in facilitating language learning (Liu, Tan, & Chu, 2010; Ogata et al., 2008). Studies also indicate increases in learners' engagement, motivation, and enjoyment (Liu et al., 2010; Ogata et al., 2008; Tai, 2012). These studies have demonstrated the potential of mobile devices to promote students' language learning in and outside the classroom (Liu et al., 2007, 2010).

However, few of them have discussed how language learners interact with their peers and produce an outcome with technologies. Little is known about how learners, based on their needs, utilize different functions of technological tools to help them along the process. To address the research gap, the study seeks to contribute to the growing understanding of how learning unfolds in mobile-assisted task-based learning environments.

Literature Review

TBLT emphasizes the centrality of a task in designing language learning lessons (Ellis, 2003; Long, 1985). The implementation of tasks enables interaction and collaboration among learners, which creates contexts where language use, including input and output, and knowledge building co-occur and facilitate one another. With the growing use of technologies, more and more researchers have recognized the reciprocal benefits between technologies and TBLT (González-Lloret & Ortega, 2014; Reinders & Thomas, 2010). As argued by Reinders and Thomas (2010), TBLT aims to provide language learners with authentic materials and real life tasks, which could be sufficiently supported by technologies or the Internet that connects people around the world.

Research on technology-mediated TBLT has reported language development in syntax, vocabulary, writing, and speaking in online task performances (Stockwell & Harrington, 2003; Vetter & Chanier, 2006). Also, an increase in language output and noticing of language components have been found (Lai & Zhao, 2006). In addition to supporting language development, the use of technology enables learners to gain access to authentic linguistic materials and interact with learners of different nationalities, which is shown to have promoted language learners' intercultural competence (Ducate & Lomicka, 2008; Lee, 2009). Similarly, the use of mobile devices is found to spark learners' interest by applying what they've learned into real-life situations (Liu et al., 2007, 2010; Ogata et al., 2008).

Aside from adopting TBLT framework, the study focuses on learner interactions and their collaborative epistemic development in computer-supported settings. Previous studies have suggested that the creation of shared understanding in small groups requires ongoing elaborations and should be captured from a more dynamic view across temporal and sequential unfolding of tasks (Damsa, 2014; Teasley, 2008). More specifically, with regard to epistemic development, four phases, including phase of initiation, exploration, negotiation, and co-construction, are identified in Onrubia and Engel's study (2009) with students engaging in collaborative writing tasks through virtual classrooms.

Of the reviewed technology-assisted TBLT studies, most of them focus on the design of learning systems and the systems' effectiveness (Liu et al., 2010; Ogata et al., 2008). Less attention has been paid to how the built-in functions of mobile devices facilitate learning. In addition, most studies examine the learning outcomes (Lai & Zhao, 2006; Stockwell & Harrington, 2003; Vetter & Chanier, 2006), instead of the learning process. Little is known about how learners, based on their needs, utilize different functions of technological tools to help them along the learning process. In order to address these research gaps, the paper seeks to unravel how language learners interact with peers and thus collaboratively construct epistemic knowledge in a mobile-assisted learning context. By exploring the learner-learner interactions, the paper offers suggestions regarding pedagogical and technological support that learners might need in CSCL environments.

Methodology

The Setting and Participants

The research site was a public high school in Northern Taiwan. The instructor for the elective course was an experienced teacher who had been teaching English for more than twenty years. She was also the participants' English teacher in regular English class.

A total of nine students, including five females and four males, were recruited in the study and they met once a week for two class periods (each class period took fifty minutes). In order to ensure confidentiality, pseudonyms were used in the study. The participants included Alex, Ariel, Claire, Elva, Julia, Kelly, Ken, Ray, Tony.

Instructional Design

The study adopted a task-based language learning approach and implemented two inquiry-based learning cycles, each of which consisted of several sub-tasks. The first cycle engaged students in the topic of heroes across time and cultures, and the second cycle introduced food and culture around the world. The main-task and sub-tasks in each cycle were designed based on the criteria proposed by Ellis (2003) to fulfill the definition of a task.

During the intervention, students interacted face-to-face with each participant having an iPad to support their learning. In order to guide the students through a variety of complex tasks as well as incorporating online materials into learning, WebQuests were adopted in this study. Developed by Bernie Dodge and Tom March in 1995, WebQuests have been shown to successfully guide the learners from one task to another as well as help learners navigate the Internet in a structured manner (Dodge, 2001).

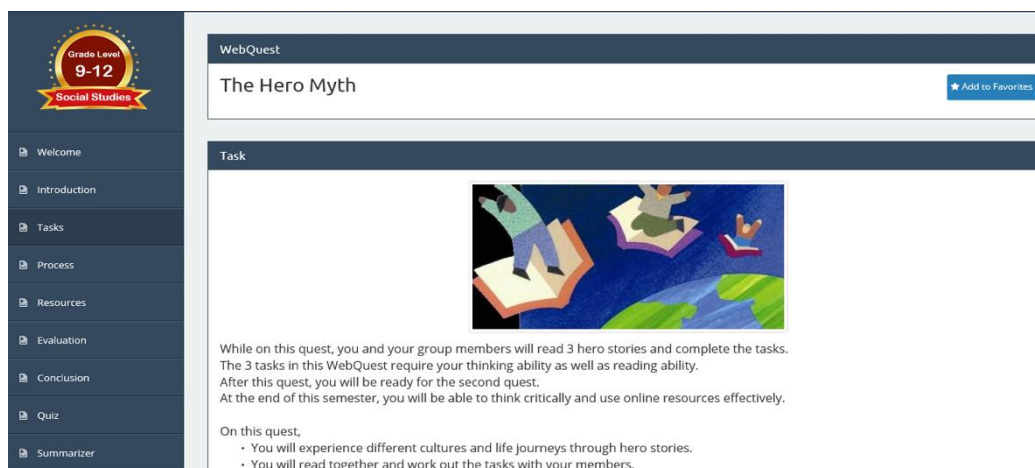


Figure 1 Interface of WebQuest website

Data Collection

At the beginning of the study, students were given enough time to familiarize themselves with the interface and the functions of the WebQuest page. Nine participants formed groups of three and collaboratively completed the assigned tasks. In the second learning cycle, they switched group members so that every student had the opportunities to work with different learning peers.

During both cycles, classroom observations were conducted. Students' in-class discussions were recorded to observe their learning process. At the end of each task, the participants wrote reflection journals to reflect on their learning. Then, semi-structured interviews were held at the end of each cycle to collect in-depth information on the participants' learning, the use of technology, and the tasks.

Data Analysis

The classroom interactions were analyzed by adopting a coding scheme developed by Damşa et al. (2010). Three dimensions of learner interactions are investigated: epistemic, regulative, and other. Under the epistemic dimension, four categories can be identified:

actions that (1) create awareness – stating problems or identifying lack of knowledge, (2) share knowledge, (3) create shared understanding – creating explanations to ideas, structuring new ideas, problematizing, or (re)framing of problem, and (4) generate collaborative actions – generating, negotiating, taking in, or elaborating ideas. Actions under the regulative dimension are about planning goals, coordinating process, monitoring progress, and reflecting on individual and collective actions. Actions in “other” dimension refer to social talks that are not related to the task.

To obtain objectivity, one of the researchers and the other two graduate students participated in the coding process. After the coding was completed, an inter-rater reliability test was conducted and it showed an acceptable inter-rater agreement between three independent raters ($\kappa=0.73$).

Other data, including interviews and reflection journals, were analyzed by using content analysis for the researchers to identify recurrent themes and possible categories.

Results and discussion

The present study aims at exploring the collaborative process of small group learning with the support of tablet PC in a task-based language learning context. During the collaborations among learners, knowledge co-construction and epistemic development are crucial aspects of learning. Epistemic dimension comprised the actions aiming at creating awareness, sharing knowledge or information, creating shared understanding, and constructing collective knowledge.

The following collection of episodes showed learner interactions of Group C when discussing their presentation about a Chinese heroine, Mulan. Excerpt 1 demonstrated how group members managed to create shared understanding of ideas across different discussion sessions in their two-hour meeting.

Excerpt 1. Group C discussion (1009 Cycle1)

PHASE I

(each group member searching for information online and reading silently)

- | | | |
|------------|--|-----------------------|
| 1. Claire: | Which period in Chinese history... She [Mulan] is from the Southern and Northern Dynasties of China. | 2-sharing information |
| 2. Julia: | She's from the Northern Wei. | 3-idea up-take |
| 3. Alex: | The Northern Wei. | |
| 4. Claire: | So, it is the Southern and Northern Dynasties? | 1-stating problems |
| 5. Julia: | Probably. | |

PHASE II

(30 minutes later when watching an online video together)

- | | | |
|------------|---|---|
| 6. Julia: | But, isn't she...? So she is from Dynasty Sui. | 2-sharing information |
| 7. Claire: | Very likely. | |
| 8. Alex: | (in silence for 3 seconds) Do we need to check the background of the war? Like why the war erupted and why she was recruited to fight? (in silence for 3 seconds) Let me think. | 1-identifying lack of knowledge
3-generating new ideas |
| 9. Claire: | ETTV News (typing) | |
| 10. Alex: | Mulan...war...reason (typing) | |

PHASE III

(2 minutes later)

- | | | |
|-------------|---|--|
| 11. Claire: | Alex, I suppose you mentioned something about the reason why Mulan joined the army? | 1-identifying focus |
| 12. Alex: | Because... I'm looking for...yes, the reason why she went for the war. The war broke out as a result of the invasion of the Hun or something? | 3-creating explanations
3-reframing problem |
| 13. Julia: | But the source we had found was outdated. | 1-stating problems |
| 14. Claire: | I think the information was doubtful. | 1-stating problems |
| 15. Julia: | Look at this! It says the Southern and Northern Dynasties. | 2-sharing information |
| 16. Alex: | The Southern and Northern Dynasties... So which country was she born? | 1-identifying focus |

- | | | |
|------------|---|-----------------------|
| 17. Julia: | It says... it's the Northern Wei. | 2-sharing information |
| 18. Julia: | Is Dynasty Northern Wei the last dynasty, followed by Dynasty Sui? So maybe... this [Dynasty Northern Wei] makes more sense and might be correct. | 4-generating ideas |

PHASE IV

(after 2 minutes' discussion on the background and characters in Disney animation, Mulan)

- | | | |
|-------------|---|-------------------------------------|
| 19. Claire: | Dynasty Northern Wei... Yes, she's from Dynasty Northern Wei. It says... | 3-reframing focus
4-idea up-take |
| 20. Alex: | (Silent reading) The Rouran army... | |
| 21. Claire: | I think both of them belong to the northern tribes back then. | 4-generating ideas |
| 22. Alex: | Are you talking about Mulan? | |
| 23. Claire: | Yes, they are Xianbei, nomadic groups in northern China, who later on established Dynasty Northern Wei. The third emperor of Northern Wei... right? | 4-elaborating ideas |
| 24. Julia: | Tuoba something [the name of the emperor]... Historically, he ascended the throne and soon had wars with the Rouran army. | 4-(co)elaborating ideas |
-

This excerpt illustrated how Group C created a shared understanding of knowledge when facing difficulties and confronting incongruent ideas during the task. It should be noted that although the excerpt revolved around the key idea of when Mulan was born, it was composed of several discussion sessions evolving over time, namely from phase I to phase IV. Each phase not only represented the time progression during group interaction but showcased group members' increasing involvement in knowledge and continual development of group understanding.

In phase I, short and simple utterances constituted the group interaction and the content mainly consisted of one-directional sharing of knowledge without further questioning and elaboration. In phase II, a confrontation of incongruent ideas drew the group members' attention back to the issue. In this phase, all group members recognized their lack of knowledge and suggested different ways, such as investigating the social-cultural context, to address the problem they faced. In phase III and IV, more interactions aiming at generating new ideas and explaining concepts were found, which facilitated the comprehension, elaboration, and co-construction of ideas. In the last two phases, knowledge was constructed through linking between students' prior knowledge and the newly acquired information as well as active exchange of ideas among group members.

In addition to a gradual involvement with knowledge, the analysis shows that learners followed certain participatory pattern when co-constructing epistemic knowledge in their small groups. The participatory pattern starts with actions in category 1 & 2 (the emergence of problems, the identification of focus, or the sharing of knowledge). Subsequent to the establishment of common ground, actions in category 3 & 4, including those aiming at generating, elaborating, and negotiating ideas, follow for the purpose of having productive interactions and accomplishing the assigned tasks. In other words, a trajectory of epistemic development, which starts from knowledge sharing, the emergence of problems, the negotiation of solutions, to the development and construction of new knowledge is observed.

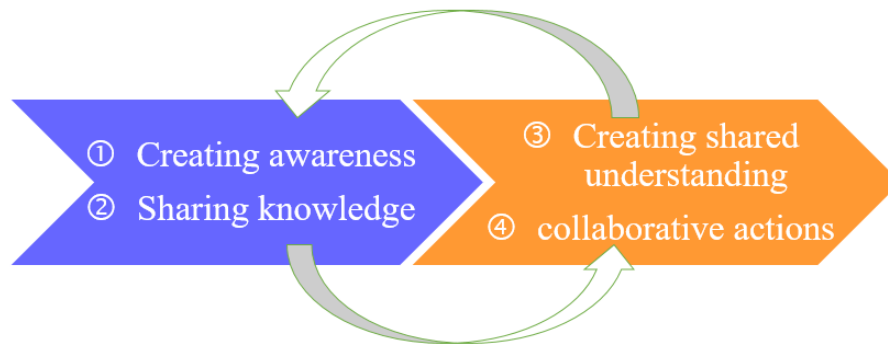


Figure 2 Recursive pattern in group collaboration

The identified pattern reflects different interactional phases in group learning, which is similar to what Onrubia and Engel (2009) have observed in their study with students engaging in collaborative writing task through virtual classrooms. In accordance with their findings, knowledge is accumulated and refined as group discussions unfold. In addition, a gradual involvement with knowledge is found, which resonates with the idea that the creation of shared understanding in small group requires ongoing elaborations and should be captured from a more dynamic view across temporal and sequential unfolding of tasks (Damşa, 2014; Teasley, 2008).

It should be noted that the identified pattern is not a linear, but a circular one. That is to say, subsequent to the actions in category 3 & 4, actions in category 1 & 2 might emerge if necessary and beneficial for the group to complete the tasks. This finding indicated that convergence of ideas often occurs after group members have shared knowledge and negotiated points of view and that agreements might come late in the whole discussion (Gunawardena et al., 1997; Kimmerle et al., 2017).

The benefits of peer scaffolding and collaboration are also confirmed in the participants' learning journals and interviews. For example, each group member might bring in their own background knowledge or pay attention to different parts while constructing knowledge collaboratively, through which all of the group members can gain insights into the topics being discussed (Journal, Claire, 1030; Journal, Elva, 1002). Previous studies have shown that conflicts, or conflicting perspectives, are helpful in triggering deeper exploration of the topic (Jermann & Dillenbourg, 2003). The process of resolving conflicting ideas is also considered to be one of the driving forces for cognitive change (Mugny, Perret-Clermont, & Doise, 1981). In short, collaboration and the emergence of conflicting perspectives in small group learning create diverse opportunities for the participants to construct knowledge in a more comprehensive manner.

Conclusion

The study described a mobile-assisted collaborative learning experience in classroom settings and examined learners' interaction. In terms of the participants' epistemic development, the interaction analysis showed that learners followed certain participatory pattern, which started with the emergence of problems, the identification of focus, or the sharing of knowledge. Then, interactional moves aiming at generating, elaborating, and negotiating ideas followed for the purpose of having productive interactions and accomplishing the assigned tasks.

Taking a step further, the study showed that the identified interactional pattern was not a linear, but a circular one. In other words, subsequent to the actions attempting to create shared understanding or generate collaborative actions, actions aiming at identifying focus, pointing out problems, and/or sharing knowledge might emerge if necessary and helpful for the group to complete the tasks.

Based on our findings, adopting task-based language learning course design helps create a meaningful context for language users to practice or apply the newly developed linguistic

knowledge. In this way, language learning is not seen as isolated language drills, but as a crucial and necessary step along the way of completing the assigned task. More importantly, the observed interactional pattern can inform instructors the importance of guiding learners with sequenced tasks as well as providing sufficient resources for them to explore.

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The investigation of personal pronouns used in academic lectures

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Abstract

Research in the lecture genre has increasingly received more attention because it is one of the main forms of instruction in higher education of, which is also the case in places where English as a medium of instruction (EMI) is promoted, such as Taiwan. However, for EMI contexts in non-English speaking countries, English lecture comprehension is a crucial concern; for example, the use of personal pronouns (e.g., "we, I, you") in a lecture may hinder lecture comprehension because the interpretation of the personal pronouns (i.e., their referents and/or discourse functions) depends largely on the context. Therefore, the present study investigated the use of personal pronouns in the lectures of five different disciplines (Engineering, Physical Science, Biology & Health Science, Social Science & Education, and the Humanities) from a variety of corpus sources that total approximately six million words. The target linguistic elements were identified through WordSmith. However, the contexts of these personal pronouns were extremely diverse and the numbers of personal pronouns among the six million words were too many to conduct a detailed analysis, with 102,529 occurrences of "you", 65,692 of "we", and 60,486 of "I". Therefore, four-word bundles with personal pronouns and the bundles over thirty occurrences per thousand words were included for further analysis. From the resulting 609 bundles with personal pronouns, it can be seen that the instructors of the hard fields, like Engineering, Physical Science, and Biology and Health Science, used more "we" to involve students, while the instructors of the soft fields, like Social Science, Education and Humanities) tended to use more "you" to direct students' attention in their lectures. This was likely due to the nature of the content knowledge in the respective disciplines, e.g., "we" was frequently used to guide students' through a series of procedural knowledge in Physical Science lectures.

Introduction

Researchers have invested great effort into exploring the word combinations because they are an integral part of human language (Firth, 1951). Much of the research into word combinations has been enabled by the recent advances in computer technology that has made it easy to identify linguistic patterns, such as WordSmith (2015) search functions that use keywords or formulaic expressions (or lexical bundles). There have been many investigations of bundles in written discourse because it is relatively easy to access and obtain compared with spoken discourse. However, more studies of spoken bundles are needed because of the clear differences between the written and spoken registers (cf. Biber, 2006, 2009; Biber & Conrad, 1999; Gray & Biber, 2013; Reppen, 2004). Therefore, the present study aims to help fill this gap by focusing the spoken discourse of academic lectures.

Lectures have been one of the most important speech events in academic settings and there are two main reasons why they have been investigated for decades. First, since the lecture is expected to be a major source for college students to acquire academic knowledge in universities (Flowerdew, 1994; Othman, 2007), students' lecture comprehension is vital for their academic success. Some studies have noted that the college students realize the importance of lectures while also struggling with the understanding of lectures as one of the most challenging tasks in universities (Badger, White, Sutherland, & Haggis, 2001; Flowerdew, 1994; Flowerdew & Miller, 1992; Jung, 2006; Miller, 2009).

The second reason for the research into lecture language involves the rise of English as an international language and as a medium of instruction (EMI) in many non-English speaking countries. Lectures in English have been considered a promising approach especially in EFL or ESL contexts in order to help students become more competitive in both English ability and the development of professional knowledge for their future career. According to Dearden's (2014) international survey, this policy was strongly supported by the majority of stakeholders (67%), including parents and policymakers, and the EMI courses have been adopted in many places, such as Hong Kong and Taiwan. However, despite their promise and potential, EMI courses present a great challenge for non-English speaking students. For this reason, Swales and Malczewski (2001) called for more research into the nature of lectures in order to help students improve their lecture comprehension.

Some studies found that the use of personal pronouns (i.e., "we", "I", "you"), in particular, might be one possible linguistic element that hinders lecture comprehension (Biber, Johansson, Leech, Conrad, & Finnegan, 1999; Fortanet, 2004). This is because the referents and discourse functions of the personal pronouns largely depend on context (Fortanet, 2004; Halliday, 1994). This study, therefore, aimed to investigate and compare the use of personal pronouns in academic lectures of five major academic disciplines. There were two research questions that guided this study:

1. What personal pronouns were used in the five academic lectures?
2. How the personal pronouns were used in the five academic lectures?

Method

In order to investigate the use of personal pronouns in the lectures and compare the uses in different disciplines, the present study generated a 6-million-word corpus of five disciplines (Engineering (E), Physical Science (PS), Biological and Health Science (BHS), Social Science and Education (SSE), Humanities (H)) from eight websites (Table 1).

Table 1. Number of words in the lecture data

Disciplines	Number of words
Engineering (E)	1,241,132
Physical Science (PS)	1,305,037
Biological and Health Science (BHS)	1,262,419
Social Science and Education (SSE)	1,348,947
Humanities (H)	1,008,937
<i>Total</i>	6,166,472

The eight websites were Michigan Corpus of Academic Spoken English (MICASE), Open Yale Course, MIT Open Courseware, Coursera, Stanford Engineering Everywhere, Rick Roderick Philosophy courses, and Missouri State University Philosophy courses (MSUP). MICASE and MSUP offered corpus meta-information (e.g., number of participants, word counts) and transcriptions of the lectures. Other websites offered free online courses that anyone could access and learn from, and they included teaching materials (e.g., handouts, tests), lecture videos, or transcriptions of the lectures. The availability of the lecture transcriptions enabled the researchers to collect a wide variety of lectures from different disciplines and analyze them.

Moreover, the lectures of different disciplines were collected in order to make cross-disciplinary comparisons. However, it was found that it was difficult to identify disciplines (Mauranen, 2006) because these websites had very different titles and categorizations on departments/disciplines, for example MIT course ware had six and MICASE had four (Table 2). In particular, MITs School of Humanities, Arts & Social Sciences included Anthropology, Comparative Media Studies/Writing, Economics, Global Studies & Languages, History, Linguistics & Philosophy, Literature, Music & Theater Arts, Political Science, Science, Technology, & Society, Women's and Gender Studies, whereas MICASE's Humanities & Arts and Social Science & Education were separate disciplines, and School of Humanities & Arts included English, History of arts, Classical studies, Asian Languages and cultures, Religion, American Culture, History of arts, and History.

In order to facilitate comparison, all of the lectures collected from different disciplines and sources were compared by only using the disciplines with identical names. In this way, only the overlapping disciplines were collected and compared. This study adopted the titles similar to those of MICASE because the MICASE categorization was more common among the other sources, thus allowing the authors to more easily make comparisons with other studies.

Two criteria were further decided in order to select representative and appropriate lectures for data analysis and comparison. First, there should be no more than five lectures collected from a single lecturer in order to limit the idiosyncratic use of language. The issue of gender was not taken into consideration because such information was not available for some of the collected lectures. Second, 60 minutes was taken as a cut-off point for a video lecture because lectures from Coursera website were divided into different sections. Therefore, 60 minutes was taken as a cut-off point in order to make these lectures comparable with those of traditionally recorded lectures. The time duration was determined based on the time spent on each course from three sources: MICASE, Open Yale Course, and MIT Open Courseware.

The target linguistic elements were identified using WordSmith (Scott, 2015). In the six-million-word corpus, it was impossible to conduct a detailed analysis of all of the pronouns because there were too many occurrences of "you", "we" and "I" (102,529, 65,692, and 60,486, respectively) and their meanings were also very different. Therefore, four-word bundles with personal pronouns were identified, and the bundles occurring over thirty times per thousand words were included for analysis in the present study. There were 609 bundles with personal pronouns for "we" (207), "I" (184) and "you" (218).

In order to analyze the collected personal pronoun bundles used in the lectures, Biber's (2006) functional categories were adopted to generate a model from both written and spoken data (Table 2). The researchers have strived to collect representative data, analyze manageable bundles, and observe lecturers' uses of personal pronouns in different disciplines.

Table 2. Biber's (2006) Categorization of Lexical Bundles with Examples

Functional categorization	Examples
1. Stance expression	
1-1 Epistemic stance—Personal/ Impersonal	<i>I don't know if, I don't think so</i>
1-2 Attitude/ modality	
1-2-1 Desire—Personal	<i>I want you to, I'm not going to</i>
1-2-2 Obligation/directive Personal	<i>you don't have to, don't have to do</i>
1-2-3 Imperatives	<i>don't worry about it, make it out to</i>
1-2-4 Intention/prediction personal/Impersonal	<i>we're going to do, you are going to do</i>
1-2-5 Ability/effort--Personal	<i>to be able to, see if I can</i>
2. Discourse expression	
2-1 Topic introduction	<i>want to talk about, if you look at</i>
2-2 Topic elaboration	<i>has to do with the, I mean it would</i>
2-3 Identification focus	<i>and this is a, one of the things</i>
3. Referential expression	
3-1 Imprecision bundles	<i>or something like that, and stuff like that</i>
3-2 Specification of attributes/Quantity specification	<i>have a lot of, a little bit about</i>
3-3 Multi-functional reference (Time/place/text-deixis bundles)	<i>as shown in Figure</i>

Results and Discussion

Based on Biber's (2006) model, the personal pronoun bundles of the present study appeared to perform three major functions: personal intention, desire as an expression of attitudinal stance, and topic introduction as a discourse expression. In other words, the function of the personal pronoun bundles were used to express instructors' intention (e.g., "I am going to"), desire (e.g., "I want to do"), and to introduce a new topic (e.g., "I'm going to talk").

Although the three functions were frequently used in most of the academic lectures, the lecturers' selection of the personal pronouns "we", "I", and "you" showed some interdisciplinary differences, as shown in Table 3.

Table 3. Numbers of personal pronoun bundles

Disciplines	we	%	I	%	you	%
Engineering (E)	50	32	47	31	57	37
Physical Science (PS)	67	39	58	34	45	26
Biological and Health Science (BHS)	49	41	20	17	51	43
Social Science and Education (SSE)	37	30	36	29	50	41
Humanities (H)	4	10	23	55	15	36
<i>Total</i>	207		184		218	

The instructors of Engineering, Physical Science, and Biology & Health Science tended to use more of the plural personal pronoun “we” (37%), while the instructors of Social Science & Education and the Humanities used more of the directive pronoun “you” (39%) and the singular personal pronoun “I” (36%) in the personal pronoun bundles. This difference may be partially explained by the different nature of disciplinary knowledge. Becher and Trowler (2001), for instance, followed the categorizations of previous researchers (Biglan, 1973; Kolb, 1981) on the distinction of academic fields, between hard-soft (i.e. existence of knowledge) and pure-applied (i.e. degree of knowledge application), and criticized these distinctions as not accounting for epistemological features (i.e., nature of knowledge). Therefore, they added six points to specifically explain the nature of knowledge: 1) characteristics of the objects of enquiry, 2) the nature of knowledge growth, 3) the relationship between the researcher and the knowledge, 4) knowledge enquiry procedures, 5) extent of truth claims and criteria for making them, and 6) the results of research (pp. 35-36). The first four points refer to the nature of knowledge between soft and hard fields, while the last two points refer to how knowledge is pursued between the pure and applied fields.

Based on Becher and Trowler’s (2001) distinction, Physical Sciences is categorized as a “hard-pure” field and its nature of knowledge is described as “cumulative; atomistic (crystalline/tree-like); concerned with universals, quantities, simplification; impersonal, value-free; clear criteria for knowledge verification and obsolescence; consensus over significant questions to address, now and in the future; results in discovery/explanation” (p. 36). At the other extreme, Social Science is categorized as a “soft-applied” field and its nature of knowledge is described as “functional; utilitarian (know-how via soft knowledge); concerned with enhancement of [semi] professional practice; uses case studies and case law to a large extent; results in protocols/ procedures” (ibid. p. 36). It seems that the hard field instructors used more “we” bundles to introduce cumulative, impersonal, and value-free knowledge, while the soft field instructors used more “I” and “you” bundles to introduce functional and applied knowledge in their respective lectures.

Additionally, Fortanet (2004) explored the use of “we” through examining the referents of “we” in academic lectures. It was found that the “we” referent can refer to both students and instructors, instructors themselves in the lectures, and others of the outside world. By including students in the lectures, the lecturers involve the students more during the explanation process (Ädel, 2010; Fortanet, 2004).

The “we” referents in the present study frequently referred to both the students and instructors in the academic lectures. Therefore, it was assumed that the more use of the plural “we” (i.e., impersonal stance) for hard field instructors was possibly due to the fact that the instructors tended to include more students when explaining “cumulative” facts of the hard field. These personal pronoun bundles mostly functioned as personal intention and were used to introduce new topics, as can be seen in the following examples.

- [1] one example of a tool to look at these types of traps. Oh, good. We have plenty of time. We actually might end early. So now **we're going to talk** about mobility.

We've given a lot of-- sorry? I was just wondering, is it possible to somehow (mit_pse_e_me_fp_006) (13)

- [2] work with very low diffusion length materials and still get a device efficiency that's not too bad. **Now we're going to** talk quickly about how our minority carrier diffusion length is measured, and (mit_pse_e_me_006)
- [3] Gifford. I'm delighted to be back with you again, here in computational systems biology. Today **we're going to talk** about chromatin structure and how we can analyze it. And to give you the narrate (mit_bhs_b_fsb_016)

It is worth mentioning that the use of "you" bundles is associated with the imperative function particularly in Biology and Health Science, such as "you can see in", "you can see that", "you can see the", "you may want to", and "you might want to". It is possible that there are many visual demonstrations in this subject area, so the instructors need this type of bundle to express the instructors' imperative intention and to direct the students' attention to see the visual aids in the lectures. This is evident in the following examples.

- [4] is released from the enzyme. There are a number of things you can see here. You can see the enzyme cycle. You can see this goes over and over again. **You can see that** the enzyme, the protein structure, is changing. It's moving as the coenzyme is binding, as the substrate is binding. You can see that (mit_bhs_b_fb_005_1)
- [5] that we're going to look things up in, OK, so this is going to be the dictionary looking things up in and it's going to be the genome sequence. And **you can see the** sequence on the left hand side, ACA, ACG, and the dollar sign represents the end of string terminator. OK. Now here's what we're going (mit_bhs_b_fsb_005)

As for the soft fields, the use of "I" (36%) and "you" (39%) was more frequent than the use of "we" (25%) in the personal pronoun bundles. While "we" bundles usually performed the functions of desire and personal intention in the hard fields, "you" (41%) bundles frequently performed an obligation function in the Social Science and Education, such as "you need to be", "you need to do", and "and so you can". The referents of "you" in the bundles referred mostly to the students, resulting in a more directive lecturing style, as can be seen in the following example.

- [6] in families. Let's just say you look to see whether X if parents are overweight whether they're more or less likely to have overweight children, and **so you can see** the clustering in families. Now that's easy to do from a research point of view but has weaknesses as well, as you can imagine because (oy_ss_ps_015)

The more use of "you" in personal pronoun bundles in Social Science lectures shows a direct contrast to the findings of Simpson-Vlach (2006) who explored MICASE. The third-person plural pronoun "we" was more frequently used in Social Science in MICASE for two possible reasons. First, there were many types of speech events in MICASE. The different event types were associated with different genres (e.g., classroom teaching, teacher-student seminar), and this is one of the most influential variables that changes a language user's choice of language expression (see Swales, 1990; Swales, 2004). While the third-person plural pronoun is a common choice in general academic settings (Simpson-Vlach, 2006), the second-person pronoun "you" was the most frequently used in Social Science lectures. Second, MICASE included only a million words, which is smaller and perhaps less representative than the present study that includes about six million words.

The other discipline in the soft field was Humanities and the instructors used more "I" bundles (55%), such as "I'm/we're going to..." or "I/we want...". In this type of structure, the "I" mostly indicated the instructor only, which suggested that the lecturers were less involved with the students and seemed to stress more personal stance.

- [7] constantly, people from all regions, all colonies sort of remarking in a not necessarily favorable way about people from other places. **And I want to** start

- I want to offer you a couple of examples, and I want to start with Thomas Jefferson, who in the 1780s devoted some of his energies (oy_ha_h_ae_004)
- [8] The novel is called *The Betrothed*. And he also wrote a historical work called *The Column of Infamy* — that is to say, Milan. Here's a picture of the event **I want to tell** you about, as described by Manzoni, acting as a historian. The city of Milan in 1630 was at war with Spain, and to their misfortune, four hapless (oy_ha_h_ew_004)

Conclusion

In short, although personal pronoun bundles in the lecture corpus were mainly used to indicate instructors' intention, desire, and introduction to a new topic, the selection of personal pronouns varied across different disciplines. These differences were likely due to the nature of knowledge in respective disciplines. The instructors of the hard fields use more plural "we" bundles to include their students and introduce hard facts, while the instructors of the soft fields use more "you" and "I" bundles in the lectures.

Despite the fact that the author of this study strived to collect data of comparable lectures, identifying different disciplines was challenging. As Mauranen (2006) suggested, although disciplines are categorized by intellectual characteristics (e.g., research methods), this principle is not universally applied. Different disciplines can vary from one country to another, and even one institution to another. For example, the British Academic Spoken English (BASE, Universities of Warwick) project included four main disciplines: Art & Humanities, Life & Medical Sciences, Physical Sciences, and Social Sciences, while MICASE (University of Michigan) included four disciplines: Biological & Health Science, Humanities & Arts, Physical Science & Engineering, and Social Science & Education. However, even with this categorization issue in mind, the findings of the present study can still be helpful for students of particular disciplines to be aware of the use of personal pronoun bundles of specific disciplines.

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The multi-case study of English teachers' mobile-assisted technology use in Southwest China from an ecological understanding

Bio data

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Abstract

As China promotes the innovative use of technology in education, mobile-assisted technology receives increasing attention from researchers. As Rogers (1995) suggested, the teacher is the key factor in technology use. Van Lier (2004) proposed that technology use should be analyzed based on the basic organizing constructs of ecology instead of being investigating as an isolated item. In this research, the mobile technology use by English teachers in China is analyzed from 4 aspects based on Van Lier's theory: Perception (driven by different purposes), Action (activities of adaption), Relation (attitudes and beliefs in the context), and Quality (frequency and expertise of technology use). The methods used in this research are the surveys, interviews and artifacts. The results are illustrated in the framework called *Mobile Assisted Technology Use by English Teachers in China*, in which these four aspects interact with each other in the circle path. By the examination of these factors, the corresponding interplay of the positive or negative factors suggests implications, such as the growing technology cultivation for teachers, the support of positive policies, the improvement of studying equipment and the technology training aimed to enhance the ability of students' parents. Since this is a small-scale qualitative study, a large-scale study involving more participants from various stakeholders needs to be conducted to verify this ecological framework in future.

Conference paper

In China, the innovative use of technology has been given adequate attention since the Ministry of Education announced the launch of the 'Networks between schools project' at the National Information Technology Conference for Elementary and Secondary Education in 2000 to achieve internet access in about 90% of the elementary and secondary schools across the country (MOE, 2001). As Zhao and Frank (2003) stated, the factors of how technology is adopted by teachers are examined in isolation from each other and rarely are they studied together from the system they interact. This research, however, is driven by the curiosity to explore how mobile technology is used by teachers in English education from an ecological perspective. The definition of mobile technology is provided in previous studies. According to Ma (2017), "The components of mobile technology consist of two essential parts. The first part is the mobile devices (e.g. laptop, smart phone, tablet PC,

etc.) which serve as both storage for teaching resources downloaded from online and a multifunction toolkit for teaching. The second is the virtually inexhaustible resources available online. With the Internet connection, the resources and e-tools such as apps and lexical tools (e.g. dictionary app or online dictionaries) stored in the mobile devices can be constantly renewed and updated" (p. 196). In this research, the data are interpreted into 4 aspects based on the constructs of ecology from Van Lier (2004): Perception, Action, Relation, and Quality. The explanations of the theory are shown below:

Ecological perspective:

As Van Lier (2004) states, "An ecological perspective" is basically "a way of being and acting in the world that has an impact on how we conduct our lives, how we relate to others and to the environment, and of course also, how we conceive of teaching and learning" (p.86). Guided by this definition, English teachers are examined through how they conduct their mobile technology use, how they connect with others and circumstances when they use mobile technology and how they think of their mobile technology use in English teaching, which can be briefly divided into 4 aspects, "perception", "action", "relation" and "quality" proposed by Van Lier (2004).

Perception:

Van Lier (2004) indicates that the perceiver is viewed as a pioneer of information which is selected by the purposes of themselves. So in this study, the English teacher is the "perceiver" who actively search for the "information" (mobile technology use) by their different "purposes" (needs to use mobile technology). To know their perceptions, their purposes are supposed to be examined.

Action:

According to Van Lier (2004), Action is an "activity in one's environment (that) brings forth the affordances in those environments that are relevant to the agent" (p.92). In this research, the activity refers to the changes English teachers embrace when they confront the difficulties of mobile technology use, to be specific, the problem solutions they chose.

Relation:

Van Lier (2004) also suggests, relation is related to "self-construction" in the ecological theory, i.e., "The self can be seen as a reciprocal relationship between the individual and his/her world" (p.93). Therefore, English teachers' attitudes and beliefs which reveals how they conceive their mobile technology use, are studied under their environments.

Quality:

According to Van Lier's theory (2004), "The fuel (of the quality) is not 'input' or 'exercises', but engagement" (p.98). So to display the quality (English teachers' engagement) of English teacher's mobile technology use, the frequency of mobile technology use and the self-efficacy of technology use (teachers' confidence of using the technology) are exhibited. Therefore, in this paper, the four aspects are perception(driven by different purpose of use), action(activity for adaption), relation(attitudes and beliefs in the context), and quality(engagement exhibited in the frequency of use and technology self-efficacy).

The questions which guide the study are as follows:

How do English teachers in Southwest China apply mobile technology in their teaching interpreted from four aspects (perception, action, relation, and quality)?

What factors matter in the mobile-assisted technology use of teachers?

The current research examines how 10 English teachers integrated mobile technology into English teaching in Southwest China (most of them from Chengdu and Chongqing) in and out of the class in order to probe into the ecology that facilitates or hinders the use of mobile technology in teaching. This study employed multiple methods including questionnaire, interviews and artifacts (concrete evidence). The questionnaire is divided into two parts: (1) background information of the participants (2) how mobile devices are used for English teaching. The participants were asked to elaborate on their choices for some questions contained in the questionnaire such as the pros and cons of the mobile

resources they used. Later, the participants were given an information sheet within 3 days to provide evidence to confirm the data collected from the questionnaire and interview.

For perception, based on the categories of teacher technology use (Russel et al., 2003), in this research, the purposes of teachers' technology use are divided into the use for preparation, communication, teachers' use in class, teacher-guided student use in class, teacher-guided student use out of class and grade record in Table 1.

Table 1 Teachers' preferred resources in different phrases of the teaching process

Purposes	Resources
For preparation	Information except for Baidu files (80%) Pictures (80%) Videos (70%) Baidu files (70%) Music (60%) Films (30%) E-books (20%) Others (20%)
For communication	①with students WeChat (80%) Emails (20%) Text messages (20%) Others (20%) ②with parents WeChat (100%) Text messages (40%) School Comm (40%) Others (20%)
For teachers' use in class	Microsoft Power Point (100%) Online practice (20%) Others (20%) E-books (10%)
For teacher-guided student use in class	Online dictionary (10%) Baidu search engine (10%) Mobile application (20%) No use (80%)
For teacher-guided student use out of class	Mobile application (60%) Online practice (40%) Videos (40%) No use (20%)
For grade record (out of the class)	Microsoft Excel (80%) Online grade record system (50%) Mobile phone applications (30%) Others (10%)

For Action, the problem solutions of the mobile technology are revealed in three interviews. These activities indicate that how English teachers adapt to the mobile technology when they use it:

"I will search for the Baidu website about the problems I have met or I will ask the colleagues around me." (Fecility; Interview data 2)

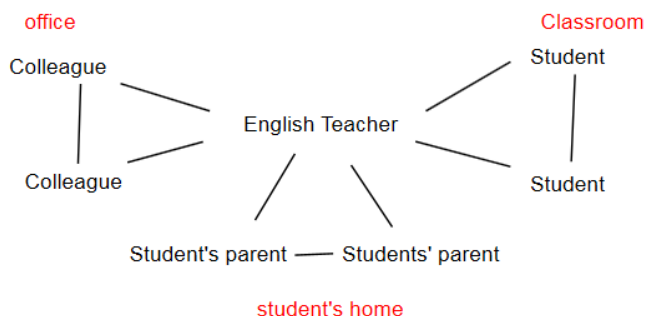
"I am still unfamiliar with the technology equipments in the classroom. But I am not worried, since the school will afford us with the related training from time to time." (Joanlee; Interview data 6)

“When there is a technology problem, I will call the worker from the computer center in our school who is in the charge of these kind of stuff.” (Gloria; Interview data 9)

Thus, their confrontations of difficulties such as Facility’s website searching, Joanlee’s confidence in school training and Gloria’s asking technicians for help illustrate their active adaptations to the mobile technology changes.

For Relation, almost every teacher basically holds a positive attitude towards mobile technology use and builds up a concept of pursuing student-centered teaching. See figure below:

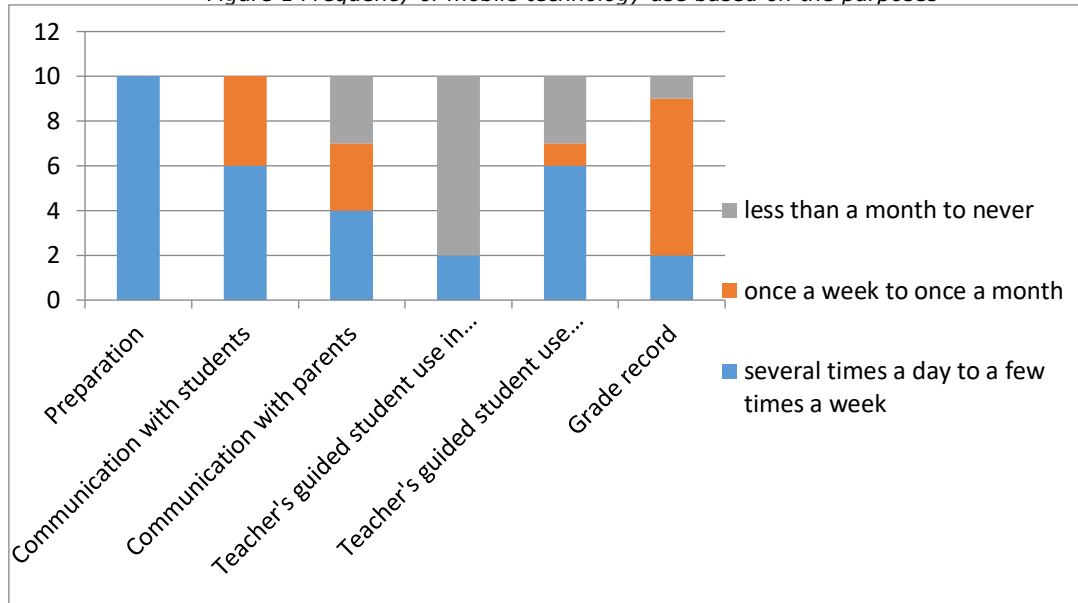
Context of the English Teachers



From the interview, most teachers commit themselves to build a class focusing on “student participation, interactive class, and learning strategy training” (Zhang & Liu, 2014, p. 187). Vicky is a representative teacher who would like to turn from the mechanical cramming into the use of mobile-assisted technology in class. She also stated that most of her colleagues are proud of their experiments with this new technology in the classroom, and she is somewhat influenced by the entire atmosphere (in office). Besides, in the case of Joanlee, she deemed the mobile technology positive, because it arose students’ interests with the use of pictures, music, videos and so on to promote students’ involvements (in the classroom). However, Lily, who teaches English in the underdeveloped region believed the new technology will be introduced to her remote school one day even though it was underused today. However, many parents of students left their hometown to work in big cities and students were left behind with their grandparents and other relatives so that it was almost impossible for them to use the mobile technology at home to study English (at student’s home). Still, the worry exists in Felicity’s case that the increasing absence of mind would be caused without technology use if the students get used to the animated knowledge presentation provided by mobile-assisted technology in class. Besides, in the case of Kate, she attributed the setback of students’ reading ability to the technology use since it might distract students from focusing on the words themselves in the classroom.

For Quality, the engagement is showed in the frequency of mobile assisted technology use and teachers’ efficacy of technology. See figure 1 *Frequency of mobile technology use based on the purposes above.*

Figure 1 Frequency of mobile technology use based on the purposes



What is interesting is that for public school teachers, most of them communicate with parents in a very low frequency. For Lily, Joanlee and Mary, they usually communicate with students' parents less than once a month. Besides, for Felicity and Gloria, their frequency is several times a month. The reason might be that there are too many students for teachers to take care of:

"There are about 55 students to around 60 students in a class here. The classes in city contain more, up to about 70 students." (Lily; Interview data 5)

"We have different amounts of students in each grade and class. Take Senior 2 as an example, there are about 60 students a class on average. And Senior 3 is even more, maybe up to about 80 students." (Joanlee; Interview data 6)

The engagement of mobile technology use is also demonstrated in the self-efficacy of using mobile technology. Most teachers revealed that they could handle mobile technology use basically. There were three teachers claiming that they do not have any difficulties. Nancy was willing to do more though she found it hard to study new techniques, but she hasn't met any difficulties that is out of her control until now. Since Cici got the experience of enriching the content such as words and sentences on the existed materials, she claimed there was no difficulty for her to use the mobile technology right now. Dannie said she was stuck in the formed structure to be innovative, but had no difficulty in using the mobile technology. Some problems the teacher met are not seen as a must-solved problem. Felicity used to be amazed by others' PPT where pages can be turned while the teacher told the story. However, she gave up trying to keep up with the latest technology, since it was hard to find instruction, even on Baidu. Lily was eager to learn more about technological knowledge since she has never received any training on it. It was hard for her to find out exactly what she wanted. What made things worse is that her school is unable to provide resources in the teaching field. She indicated that her lack of pioneering spirit as an instructor or researcher hinders her from learning new techniques as well. Joanlee stated that to search what she wanted in the sea of information is very time-consuming. But luckily, her school provided some technological training. And Jenny didn't know how to put the content of the mobile phone on the screen so that she thought the app such as Fun Movie Dubbing was not used fully. But Kate's difficulty could not be solved in a short time because of the political reasons since it was hard for mainland China to open all the search engines such as Google.

From these findings, the framework called *Mobile Assisted Technology Use of English Teachers in China* is built in figure 2.

*Figure 2:
Mobile Assisted Technology Use of English Teachers in China*



As showed in the figure, the mobile assisted technology starts from teacher’s perception which is motivated by the different purposes (needs) of teachers. Then teachers adopted actions, the activities to solve the problems in the mobile-technology use to adjust to the new environment, either from their own efforts to seek help, or from the formal school training. Next, the relation is built. “The self” teacher creates through the experiences of technology application is displayed in their beliefs and attitudes towards technology use in English teaching. Finally, the quality, the engagement, is demonstrated in the frequency of mobile technology use and teachers’ existing efficacy of technology use. However, the whole process is not a linear path, instead, the quality, the engagement of teachers will in return affect their perception, thus the whole process operates in a circular direction. For example, the proficient use of mobile technology such as baidu files will enhance a teacher’s technology use serving for the purpose of preparation.

Some key factors affecting the mobile technology use are found, as illustrated in Table 2:

Table2: Factors affecting Mobile-assisted Usage

Internal factors		
self-efficacy	skills' training	lack of self efficacy
positive attitude	consideration of convenience and worries	negative attitude
efficient integration	pedagogy training	traditional reappearance
External factors		
Policy: suggestions to use	Policy maker	Policy: requirements to control
Improved classroom equipments	Money	Limited classroom equipments
Support of family	Family technology training	Protest of family

Diagram description: The table is divided into two main sections. The top section, labeled 'Internal factors', contains three rows of variables. The bottom section, labeled 'External factors', contains three rows of variables. A bracket on the left side groups the first three rows as 'facilitators' and the last three rows as 'barriers'. A bracket on the right side groups the last three rows as 'barriers'.

Since the facilitators and the barriers are the two sides of the same variables, these variables are viewed as the key factors, which suggests that the improvement of mobile assisted technology use should attach importance to the support for teachers that focuses on the internal factors such as technology skills training, pedagogy training, building of positive attitudes, and the external factors such as positive policies, equipment improvement and technology training of the students' parents.

In summary, based on Van Lier's construction of ecology from four aspects: perception, action, relation and quality, the process of mobile technology use of English teachers in China is not followed in the linear path but in a circle way. The interplay of positive or negative factors suggests implications such as technology training for both teachers and parents, the guidance of teachers' positive attitudes, the pedagogy training for teachers, the implementation of the positive policy and the increasing investment of money. In further study, a large-scale study involving more participants from various stakeholders will be conducted to verify this new ecological framework.

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A design of college English internet-based blended teaching with the guidance of Chinese standards of English language ability

Bio data



Cuixia Hu was born in 1982. She graduated from Chongqing University as a postgraduate in 2009 with a master's degree in Applied Linguistics, mainly researching English Teaching and Information Technology. Up until now, she has published 4 papers in different journals as the first author, and 4 papers as the second, taking an active role in the College English curriculum reformation.



Liemei Huang was born in 1984. Graduating from Chongqing University, she got her master's degree in Applied Linguistics in 2009, focusing on English Teaching and Information Technology. She is a lecturer and, she has published 3 papers in different journals as the first author, and 3 papers as the second.

Abstract

This paper firstly introduces the theoretical bases and design of the internet-based blended teaching mode, which is divided into three stages: pre-class online autonomous learning; in-class learning; and after-class online consolidation and knowledge expansion. The paper then discusses the implementation process of the blended teaching system based on the first unit of the self-compiled textbook "Dandelion College English". Hopefully, this research has reference significance on College English reformation with the guidance of *Chinese Standards of English Language Ability*.

Conference paper

Introduction

"Blended teaching" generally refers to the combination of two or more teaching forms and information technology. This includes network platform, micro-lecture, and coursework. It attempts to combine the teacher's input, the student's subjectivity, the advantages of online work and classroom efficiency (Qiao, 2018). The variety of teaching methods can mobilize students' learning enthusiasm and improve classroom teaching efficiency. In recent years, the combination of entity classroom and internet-based autonomous learning has become the dominant mode of College English teaching in China (Chen & Wang, 2016).

In June 2018, the *Chinese Standards of English Language Ability* (referred to as the "CSE") issued by the Ministry of Education was formally put into use. The CSE encourages the application of learning and emphasizes the use of language. It provides a strong theoretical support for the cultivation of Applied Talents in Colleges and universities.

The CSE also provides a theoretical basis for the compilation of College English textbooks, the reform of teaching modes, the improvement of teaching methods and means, and the

establishment of a scientific and feasible evaluation system for college teachers (Li, 2018). Based on the college English teaching practice, this study introduces the theoretical bases and specific design of the blended teaching mode guided by CSE, and explains the concrete implementation process of the blended teaching mode based on a unit of the self-compiled teaching material.

Theoretical Basis.

Education Ecology

According to the viewpoint of educational ecology, the whole college English teaching system is a natural and open ecosystem composed of teachers, students and environment in a certain space (Gu, 2012). In order to ensure the internal harmony of the classroom ecosystem, it is necessary to strengthen the interaction cycle with the external world outside of the classroom. This can support the exchange of energy and information, and ensure the survival and development of the entire educational ecological environment (Ye et al., 2017).

At present, colleges and universities are arranging their teaching according to the requirements of College English Teaching Requirements. The teaching weeks of each semester lasts for 16-18 weeks, with 4-6 hours per week (Sui & Zhou, 2012) and classroom study time is generally very limited. However, learning English is a long-term continuous process, which requires students to devote plenty time to learning. This requires college English teaching to therefore break the limitations of time and space, and to extend the classroom boundaries by putting students in an open Internet ecosystem to increase the learning opportunities.

The blended teaching system provides students the advantages of learning at anytime and anywhere, breaking the time and space limitations of traditional English classes, and helping students to realize the fragmented learning.

Constructivist Theory

Constructivism defines learning as a process in which the learner actively processes information from the external environment. It is an important theoretical basis for the integration of information technology and curriculum, which is mainly divided into two parts: building a learning environment and designing self-learning strategies.

Constructing a learning environment includes creating scenarios related to intended topic and then providing the necessary resources to encourage cooperative learning.

Self-regulated learning strategies include scaffolding, anchoring, self-feedback, etc. (He, 2005). These aim to stimulate students' initiative and enthusiasm by enabling them to "construct" knowledge independently.

Constructivism theory runs through the whole process of blended teaching, from the compilation of textbooks to the design of teaching activities. Teachers can design flexible and diverse teaching activities to enable students fully participate in classroom activities. At the same time, students can actively take part in the class through demonstrations, debates, discussion and so on. This enhances the students' thinking and expression and cultivates the students' all round ability.

Design of internet-based blended Teaching Mode with the guidance of CSE

Dandelion College English, a self-compiled textbook, is used in our college English curriculum. The main features of this textbook are as follows: guided by scales, taking full account of the difficulty gradients of each unit and the books; the overall difficulty is in line with the English proficiency of College students; and the topics are interesting and practical. In addition, the textbooks are suitable for blended teaching, including online and offline parts. The model can be summarized as: on-line autonomous learning before class + knowledge internalization in class + on-line consolidation after class and extra-curricular development, which are organically integrated and complementary.

On-line Autonomous Learning before Class

Dandelion College English is divided into two volumes, each having five units. Each unit includes six modules: Warm up, Talk Show, Listening Drills, Reading Exploration, Grammar Room, Supplementary Material.

The design of teaching materials and activities in all five units follows the principle of gradual progress where students gradually acquire higher English ability through learning. For online autonomous learning before the class, teachers assign videos, audios and wording materials through network-based teaching platform. Students are urged to log on to the teaching platform to learn the learning materials assigned by the teacher independently during their own time. They are free to arrange learning, testing, discussing and so on, so as to "warm up" classroom teaching.

The selection of learning content and the setting of learning tasks are fully combined with students' existing ability level, aiming to help students acquire a higher level of ability.

In case of problems, students can post questions in the discussion area and ask other students or teachers for help. By browsing students' posts and replies, teachers can also understand students' progress and learning difficulties well, so as to follow up in class.

Knowledge Internalization in Class

Off-line physical class is the continuation and extension of students' on-line autonomous learning, as well as the process of face-to-face interaction between teachers and students to help students gain great understanding.

In class, teachers set up teaching tasks and activities based on the students' ability level to fully participate in the class. Students either report the results of online learning, or discuss and solve difficult problems in groups. Teachers explain the content, or the difficult knowledge points students may have found difficult during their online learning. The English classroom therefore becomes an "English training ground". Students exercise their oral English ability by the use of presentations which cultivates their critical and creative thinking ability.

At the same time, teachers can make full use of the interactive advantages of the network platform. This includes publishing discussion topics with students participating in the discussion, publishing the discussion results, and making real-time summaries. Teachers can also publish topics where students participate in voting.

The rich and colorful classroom activities combined with the powerful interactive functions of the teaching platform make the physical class full of vitality. Teachers are no longer the imparters of knowledge, but the organizers of the classroom, the guides of learning, the reviewers of learning results and the interpreters of learning difficulties. Students are no longer passive knowledge receivers, but active builders of knowledge and participants in the learning process.

On-line Consolidation and Extracurricular Development after Class

Through self-study before class and better understanding of classroom knowledge in real class, students have mastered the teaching content. In order to test students' knowledge mastery, teachers may push relevant tests or assignments through the network platform to help students consolidate and apply what they have learned. They can also create situations according to the teaching content which cultivates the students' competence in intercultural communication. Students may choose suitable learning materials according to their own hobbies.

The concrete implementation process of blended teaching mode

Taking the first unit of Dandelion College English "College Life" as an example, the author introduces the concrete implementation process of the blended teaching model. The unit is designed with six lessons in three weeks. In this paper, the author only introduces the design of teaching activities in the first week.

Before class, teachers assign videos about American higher education institutions on the online platforms. The teacher's ask students to answer two questions in their own time: (1) How many kinds of higher institutions are mentioned in the video? (2) What kind of students are preferred by American universities?

Because this video has standard speaking speed the tasks are designed with relatively low difficulty. By replying to the online discussion forum, teachers can see that 90% of the students can give accurate answers to the questions.

In class, teachers give several key expressions in the video, such as liberal arts university, well-rounded students and so on, and organize students to have relevant discussions. Combining with students' speech, teachers expand their knowledge and list five aspects closely related to students' College life, students, major, facilities, staff, degree. Let students brainstorm in groups and list the words they are familiar with. Based on the students' answers, teachers can accurately grasp the students' English vocabulary level. According to the principle from easy to difficult, teachers will list the vocabulary that students must master. Students can use learning tools to find out relevant examples, understand the usage of words, and memorize words through examples. Secondly, according to their own understanding of video, the typical educational activities are sorted to deepen the understanding of University education. Thirdly, teachers give two topics: talking about their favorite teachers; describing one of their best friends. Teachers give relevant vocabulary and sentence pattern hints. Students are asked to practise oral English in pairs, and then show their speeches. The purpose is to exercise students' oral expression ability and self-confidence. Fourthly, teachers ask questions to stimulate students' thinking. What aspects of university do you like or dislike? What was your dream in college? What are your plans to achieve your dreams?

After class, in order to help students consolidate the content of the classroom, teachers assign a certain amount of online homework. (1) completing word puzzles. There are two parts. Puzzle A belongs to the basic vocabulary. It corresponds to the Level 3 of CSE, which requires all students to complete. Puzzle B Vocabulary corresponds to Level 4 of CSE, designed for students with better foundation. (2) Listening to the audio on-line to complete the relevant tasks: find out the difficult points in listening, and prepare for the next lesson.

Pre-class and post-class stages are mainly online, while in-class teacher-student interaction is mainly offline. The setting of teaching content and the design of teaching activities are fully guided by CSE, follow the principle of gradual progress, and aim at cultivating students' abilities. Pre-class preparation, in-class learning and after-class consolidation complement each other in three stages. They not only expand classroom learning time and cultivate students' autonomous learning ability, but also improve classroom efficiency and increase students' participation in the classroom.

Conclusion

With the guidance of CSE, the blended teaching system pays attention to the comprehensive use of English ability and gradual improvement of students' English ability.

In this teaching system, online learning and off-line classes are integrated organically. Students can not only ensure the smooth implementation of classroom teaching, but also save a lot of classroom time. This, as a result, improves classroom efficiency. Through bold questioning and active expression of their own understanding and views, students become active to absorb and explore knowledge. Classroom participation has been greatly improved, and autonomy in learning has been greatly enhanced, so that English teaching has been revitalized. However, with poor English foundation, some students have difficulties in the process of online learning, lagging behind the progress of group or class learning. Further exploration is still needed to better mobilize the enthusiasm of students with learning disabilities.

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Inclusive telecollaboration meets diversity in TeCoLa: teachers' & learners' voices

Bio data

Kristi Jauregi is associate professor at Utrecht University (The Netherlands). Her main area of research is on CALL. She is particularly interested in studying the role that telecollaboration plays in enhancing the communicative competence, intercultural awareness and motivation of L2 students, and in reshaping the pedagogical beliefs, activities and roles of language teachers. She has initiated and coordinated different European projects (TeCoLa, NIFLAR & TILA).

Abstract

This paper presents the experiences around telecollaboration projects that have been carried out at primary, secondary and vocational schools in Europe within the framework of the Erasmus+ project TeCoLa: Pedagogical differentiation through telecollaboration and gamification for intercultural and content integrated language teaching (2016-2019, www.tecola.eu). Within TeCoLa 40 teachers and around 750 learners from 10 countries, have participated in telecollaboration exchanges using different virtual environments. Diverse data has been gathered: chat logs, recordings, surveys, and interviews, to disentangle how learners and teachers experience telecollaboration. We show in this paper how issues on inclusion and diversity have been addressed in TeCoLa. We present the results of a case study carried out between learners of a primary school and a secondary school, focusing on the learners and their teachers' voices.

Conference paper

Inclusive foreign language education

In our highly diverse society, it is important to foster social inclusion and active citizen participation to contribute to social cohesion and democracy. Lately, inclusion has become a central topic of debate on educational settings. Inclusion seeks to cater for the heterogeneity present in most educational contexts, which demands individualised and differentiated pedagogical strategies. Interesting in this perspective is the fact that inclusion approaches learner heterogeneity in terms of "valued diversity rather than as a teaching obstacle" (Moschenbacher, 2016: 160).

Inclusion has been used in two major senses in education. The narrower approach of the term refers to learners with disabilities or learning difficulties being included in regular classes. In its broader sense, inclusive educational practices comprise social dimensions such as social class, gender, ethnicity, and other aspects that "may cause learners to be excluded or disadvantaged and potentially result in detrimental effects with respect to teaching outcomes". (Moschenbacher, 2016: 164). Inclusion is a basic right of everyone and is achieved when all barriers, discrimination and intolerance have been removed, and as result learners feel included and supported. In TeCoLa we have followed inclusion in this broader sense.

Diversity & inclusion in the TeCoLa project

The Erasmus+ project TeCoLa, Pedagogical differentiation through telecollaboration and gamification for intercultural and content integrated language teaching (2016-2019, www.tecola.eu), promotes telecollaboration (Guth & Helm, 2010) to enhance meaningful foreign language learning in non-university educational settings throughout Europe, while training and coaching teachers on how to better integrate telecollaboration exchanges in their specific teaching context. In TeCoLa special attention is given to technology enhanced task development that fosters authentic communication and cooperation in diversity, intercultural experience and awareness raising, learner agency, digital literacy and knowledge development.

Between 2016 and 2019 several telecollaboration pilot projects have been carried out at primary, secondary and vocational schools in Europe within the framework of the TeCoLa project. Approximately 40 teachers and 750 learners from 10 countries, have participated in telecollaboration exchanges resorting to different interactive tools.

Diversity is approached in TeCoLa “as a socially meaningful concept in education that should strategically lead towards understanding and valuing diversity as a prerequisite for an inclusive society” (Jauregi & Melchor-Couto, 2018a; 113). This implies the development of social and intercultural strategies that will help learners understand and embrace experiences, views and values that are different from their own, as enriching for their self-identity.

Within TeCoLa we look at diversity from different angles:

- Local diversity, which refers to the diversity present in the language classroom (learners with different talents, needs, interests, cognitive development, language and intercultural skills, social and cultural background);
- Cross-educational diversity: learners from different school sectors engaging in telecollaborative work with each other;
- International diversity: learners collaborating internationally with learners from other countries.
- Technological diversity: different interaction tools being used to facilitate the inclusion of all schools in telecollaboration exchanges, irrespective of their IT level; technological diversity also caters for the individualised needs of different learners.

In TeCoLa inclusion is present at different levels, one of those being, the way we organise and structure telecollaboration exchanges in the schools so that all learners can participate and learn from the exchanges in a supportive environment.

Inclusivity also means respecting people from different backgrounds and cultures. In TeCoLa learners are exposed to other cultures and world-views as they are paired up with a peer abroad who has a different cultural, social and probably educational background. The learners meet in the virtual environment, carry out a certain task in the target language, and reflect about the exchange (whether it was meaningful to them, their role and their peer’s role during the interaction, what they have learned, which difficulties they have experienced, etc.). So, learners do not just hear about other cultures but do actually engage in intercultural encounters and reflect about them. This reflective practice contributes to their understanding of other ways of acting, communicating and being, helping them to become more flexible and tolerant. In this sense inclusivity is closely related to breaking stereotypes, encouraging alternative perspectives, debating ideas and respecting different viewpoints. This is very much stimulated through the TeCoLa tasks, where learners are encouraged to share their ideas, lives, interests and to build a good rapport with their peers. The creation of a supportive, respectful environment which promotes diversity and equity (Hall, 1982) are central to the TeCoLa project.

The tasks that have been developed in TeCoLa address differentiation (by suggesting a different tool, communication mode, topic, more or less cultural & linguistic support, different assessment forms, etc. in the task description), to encourage participation from

everyone and foster success by personalising the tasks to meet the students' needs, interests and learning styles. See Table 1 for an example on how differentiation has been included in the task description on fashion.

Table 1. Example of differentiation of the Fashion task¹.

Summary

In this task students meet in small international groups or pairs in the TeCoLa Virtual World. They talk about their favourite outfits, what they wear at school or at special occasions, where they buy their clothes, how often they buy new clothes, and whether fashion is important for them or not.

Before meeting in their international team, the students prepare short presentations about their fashion preferences, which they can upload to the discussion boards.

In this task differentiation has been introduced at different levels:

- When forming teams and arranging meetings: instead of the teachers doing this, the option is provided to the learners to manage themselves the meetings using their team discussion board.
- A pre-activity for getting to know each other is suggested as ice breaker. Learners are given the option to carry out the pre-activity in the virtual world playing synchronously the Snakes & Ladders game or asynchronously in written language using the interactive wall Padlet.
- Content related: The teachers can provide a worksheet with guiding questions to learners who need extra support. At the same time and depending on the students proficiency level, the teachers can provide vocabulary support. It is suggested that it might be helpful for the students to practice talking about their presentation in pairs or small groups before their international meeting takes place.
- Organising the Meeting in the TeCoLa Virtual World: Students who have the facilities at home and feel comfortable being on their own can work from their home computers, while those students who do not have these facilities at home or feel uncomfortable working on their own, could use a computer at school assisted by the teacher or a classmate
- Self- and Teacher assessment: The questions may differ depending on the students' proficiency level and learning needs.

Another way to strengthen inclusivity in TeCoLa is by focusing on Lingua Franca pedagogical approaches to language teaching. Mainstream education has idealised the view of the native speaker as the perfect model to be followed and imitated when learning a language (c.f. Widdowson, 1994). This systematically disempowers language learners, while the goal to be achieved is unrealistic. This is clearly a questionable model for inclusive education. A more valuable role model than the native speaker is the successful intercultural communicator (Byram, 1997), who might make some errors but who is able to communicate efficiently. The use of the target language is then primarily a means to successfully engage in intercultural communication and develop intercultural, language and interactional skills. This pedagogical paradigm shift for inclusive foreign language education puts "communicative efficiency as a teaching target, task-based language use, a tolerance

¹ The description of the Fashion task is to be accessed via our TeCoLa Open Educational Resources Pool: <https://sites.google.com/site/tecolaprojectoer/>

or even appreciation of non-native features as indexes of diversity and learner creativity” at the centre of the inclusive pedagogical approach (Moschenbacher, 2016:182). Within TeCoLa most telecollaboration exchanges (17 out of 21) were carried out in a Lingua Franca communication constellation, in English (Kohn & Hoffstaedter, 2017), and also in French, German and Spanish, with very satisfying results.

Inclusion meets diversity: a case-study

This telecollaboration pilot has been chosen for presenting a great degree of diversity and for being a good example for inclusion. In this pilot, 17 Dutch learners from a bilingual secondary school participated in Spanish with 22 primary school learners from Spain, who carried out telecollaboration activities in English. The Dutch and the Spanish learners had an A2 proficiency level in their target language. The communication was asynchronous and the tool being used for the exchanges, Padlet. Five groups were created in each school and subsequently paired up with parallel groups of the other school. Separate Padlet walls were created for each paired up international group. The participants had to create four task-based vlogs in groups, one per week in a period of a month, and upload them in their respective Padlet wall for the international peer group to view and react. In the first task they introduced themselves and their school. In task 2, they provided general information about their country/region. In task 3, they informed their peers about touristic attractions in their region. In the last task, they provided cultural information about their region/country (how people live, what a regular day looks like, how they celebrate their birthday, etc.). Tasks 1, 2, and 4 were carried out in the target language (Spanish for the Dutch learners and English for the Spanish learners). The topic of the third task was more complex and it was carried out in Spanish for the Spanish learners and in English for the bilingual Dutch learners (Jauregi & Melchor-Couto, 2018a).

Diversity was very present in this exchange at different levels:

- Education system: learners from two different educational levels, primary and secondary schools, were collaborating with one another, the former being mainstream and the latter bilingual education.
- School: The Dutch school was an IT+ school; their technological infrastructure was very good with advanced computers, good broadband internet connections and IT support. The Spanish school, on the contrary, was an IT- school, with few old computers and unstable internet connections.
- Teachers: There were differences at two interrelated levels: teacher familiarity with telecollaboration and pedagogical coaching process. The Dutch teacher had previous telecollaboration experience: she had written her M.A. thesis on a telecollaboration exchange she had initiated at a primary school; in addition she had carried out a previous telecollaboration pilot exchange with her learners in the TeCoLa virtual world. The Spanish teacher, conversely, had no previous experience and was a newbie what concerns telecollaboration. Regarding the coaching process, the Dutch teacher included telecollaboration as an add-on activity in her Spanish course: learners would get the last 10 minutes of the class to work autonomously on their vlogs or they would have to do it outside classroom hours. She provided almost no coaching to her learners. On the contrary, the Spanish teacher was very involved in the telecollaboration exchanges and would use his English classroom hours to help and coach his learners to create, record and upload the vlogs.
- Learners: in addition to learner classroom heterogeneity, both groups differed in terms of both cognitive, emotional and life maturity as inherent to age differences: the Spanish learners were 11-12 years old while the Dutch ones were between 14 and 15.
- Tasks: The Dutch teacher wanted to follow her curriculum; it was of major importance for her that the telecollaboration tasks would fit in the curriculum. As to the Spanish teacher, the curriculum offered him much flexibility, and he was open to follow the Dutch patterns.
- International experience: obviously through this telecollaboration project learners were confronted to different world-views and cultures: the Spanish and the Dutch ones.

- Language constellation: the Dutch learners were creating the vlogs for native speakers of Spanish, while the audience of the Spanish learners were more advanced English Lingua Franca speakers.

In this highly diverse setting, much energy was invested by the teachers and the TeCoLa coaches (for the importance of coaching see Jauregi & Melchor-Couto, 2018b) to make this telecollaboration project become a fruitful inclusive experience for all. This implied initially the need for a continuous, fluid, dynamic and sound communication between the TeCoLa coaches and the teachers, where the specific pedagogical, contextual and organisational issues were planned, discussed and adapted, in a recursive mode. This communication involved the use of inclusive strategies: listening to each other, understanding the other's point, negotiating meaning, establishing rapport and accommodating to each other in order to meet common goals. So for example, the Dutch teacher accommodated to the technological situation of the Spanish school and agreed on using Padlet for telecollaboration. The same happened when discussing the task content. Here the Spanish teacher complied to adapt to the curriculum requirements of the Dutch teacher.

Different sources of data were gathered from this pilot experience: the vlogs, weekly surveys and interviews to learners and teachers. In this paper we focus on the interview responses we got from the two teachers and seven learners, two girls and a boy, age 15, from the Dutch secondary school and two girls and two boys, age 12, from the Spanish primary school. A semi-structured interview was used in their mother tongue, in order to know how learners and teachers experienced and valued the telecollaboration project.

Teachers' voices

Four aspects of the teachers' perceptions will be highlighted here: (1) the reasons for participating in telecollaboration exchanges, (2) their role in the project, (3) the challenges they faced, (4) the effect of age difference and (5) general project valuation.

When asked why the teachers had decided to participate in the telecollaboration project, the Dutch teacher pointed out that languages are learned to be used and that thanks to the project her learners had been able to use the language in a real situation, so achieving the main target of the project: to generate curiosity towards another culture, towards children from another culture. The Spanish teacher was a quite directive teacher who habitually follows the English book in his classes. He wanted to break with this routine and offer learners a more creative and innovative pedagogical experience, so that they realise that learning a language is more than just learning it.

Over their role in the telecollaboration project, the Dutch teacher saw herself more as a planner and facilitator (contributing to task development, clarifying general project questions particularly through the email, facilitating technology use), than a real coach. The telecollaboration project was conceived as an add-on activity in her case; she could not invest much time on it. Accordingly, she gave a lot of freedom to her learners; especially introvert learners missed teacher feedback and coaching. The Spanish teacher, on the contrary, was very engaged and directive. He helped the learners in the creative process providing clear guidelines and topics to be addressed in the vlogs, making the recordings and uploading them to the interactive wall. In the Dutch case, learners had to do it all on their own.

The challenges they faced were different for both teachers. For the Dutch teacher, not being able to invest more time and energy coaching her learners was dissatisfying, while for the Spanish teacher the innovative pedagogical approach constituted a real challenge.

When asked whether the fact that the learners were interacting with peers of different ages and educational school levels would have affected the way they communicated, the Dutch teacher pointed out that her learners, being the oldest ones, might have made less effort on the linguistic level, but this divergency has certainly facilitated speaking spontaneously without fear. According to the Spanish teacher, this age difference had no effect in the way his younger learners communicated. In his view, divergent linguistic levels would have had

more effect on communication than age differences. Both groups had a A2 proficiency level in their respective target languages.

Both teachers very much liked the project, the Padlet platform being very straightforward and easy to use. The Dutch teacher liked all in the project, but particularly that "the language is the vehicle to reach a destination. In this case learners used the language with a purpose, the intercultural part, to discover a new group of people". As to the Spanish teacher he valued most the innovative pedagogical approach allowing learners "to produce something away from the monotony, the daily routine, which is interactive and motivating. It gave them the possibility to generate things they usually do not do". Both teachers would like to continue with these virtual exchanges, the Dutch teacher integrating it better within the curriculum and the Spanish teacher organising it in a different period (not at the end of the school year), and with more time to view, react and create the vlogs.

Learners' voices

Most interview questions were geared towards valuing different aspects of the project.

Overall all interviewed learners liked the telecollaboration exchanges. Interestingly, the younger Spanish learners were more positive about the telecollaboration experience, than their Dutch peers. In a 10-point scale Spanish learners valued the project with a mean value of 8,2 versus 6,8 of the Dutch peers. They all liked meeting with learners from another country and communicating with them in the target language, which involved doing other things than the regular exercises from a book. They enjoyed the cultural tasks and the tools being used.

The Dutch learners complained about the lack of clarity (they did not know what to do), lack of time to carry out the activities and the lack of feedback (they got little or no feedback from their teacher), which made them uncertain. This clearly influenced their general valuation of the project.

Learners reported to have learned about the other culture (learning a foreign language, breaking stereotypes), to communicate in the target language, which was not easy for them, and to collaborate in teams. Two of the three Dutch learners enjoyed most viewing their peers' English vlogs and listening to their English pronunciation. One of the three was extremely positive about their younger peers; she found them very "cute". Just one Dutch learner from the seven interviewees said to have preferred to participate with a similar age group in the exchanges.

Six out of the seven learners enjoyed creating vlogs and sharing them with their peers in Padlet. The Dutch learners asserted that they liked making vlogs more than writing down reports. They found this way of working (writing down ideas, making the recordings, adapting them when needed) a very good one. The Dutch learners had participated in a previous exchange using the TeCoLa virtual world for synchronous communication. One of the interviewees clearly preferred this instant interactive environment with avatars than the asynchronous Padlet exchange. As to the Spanish learners, three out of four would prefer an instant communication platform like Skype, to have a more direct and interactive experience with their peers, next time.

When asked whether they would like to go on participating in these international virtual exchanges, they all agreed they would.

Conclusions

In this paper we have seen an example of how the development of inclusive strategies can be developed in an especially diverse telecollaborative. It is important to notice that, compared to the traditional classroom inclusion sense, inclusion in telecollaboration projects includes an additional layer, as teachers from different international educational systems, with different pedagogical and cultural views will need to cooperate with one another in order to achieve common-ground and assist inclusion in such a project. This implies the need for a continuous sound communication between the teachers, where the specific

pedagogical, contextual and organisational issues are planned, discussed, adapted and readapted. This communication involves the development and use of inclusive strategies: the need to listen to each other, understand the other's point, negotiating meaning, establishing rapport and accommodating to each other in order to meet common goals. Exactly the same is required in a second pedagogical layer, the contact and communication with the learners. The need to establish an open dialogue and provide supportive coaching to learners during the whole process are paramount for a successful inclusive telecollaboration experience.

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A Study on the use of YouTube-based data curation to support learner-directed writing education

Bio data



conferences.

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Abstract

The purpose of this study is to present the instructional strategies of utilizing YouTube-based digital information for data curation in the university writing education and to explore the impact of implementing interactive and collaborative writing activities using the social media within the discourse community. This study is based on an advanced writing course titled with Global Citizenship and Writing as Communication from a university in the middle part of Korea. The most important tasks in this course are for the students to search and share digital data from the various online sources such as YouTube within their discourse learning community and then to write articles in relation to the global citizenship through the digital data curation procedures. This study tries to propose a solid example and instructional strategies of applying digital curation or data curation to university writing education.

Conference Paper

Introduction

With the integration of the new digital technology into the education field, traditional educational resources have been translated into interactive digital forms through the use of various digital authoring tools (Neo & Neo, 2004). Since digital literacy has been emerging as an important ability for this era, the use of digital information and technology has played an essential role in transforming the pedagogical environment for writing education. This shift in curriculum development and syllabus design has enabled teachers to implement and integrate new digital technological elements into the course contents in order to support the multisensory educational environment for the students from the new digital generation. Recently, among educators, the utilization of digital resources from YouTube has been considered as an effective and innovative instructional techniques and

strategies. YouTube is a video-creating and -sharing website and has been also regarded as the effective and innovative teaching and learning platform to provide users with creative and dynamic opportunities while they engage not only in viewing, creating, uploading, and distributing videos but also in sharing ideas and digital contents (Alwehaibi, 2015). YouTube can be a powerful instrument which can enhance language learning both inside and outside of the classrooms. Digital materials on YouTube can be integrated into classroom learning as authentic realia to inspire intercultural learning, enrich exposure to diverse forms of language, and support genuine language development (Park, 2017). Educators can consider syllabus design using reading and writing activities based on video clips from YouTube (Watkins & Wilkins, 2011).

Writing activity is an act of restructuring the existing knowledge and giving the new value to it by adding the writer's point of view. Recently, the use of YouTube has been remarkably growing, so university students rely on digital contents from YouTube in order to access background knowledge and search for writing topics and resources. Therefore, it is necessary for educators to encourage students to realize the advantageous use of the digital information for effective writing education. In writing activities of this digital era, the process of approaching writing resources and exploring topics is very similar to the process of approaching and analyzing data and reusing the data. This process can be described as digital curation or data curation (Faniel, Minor, & Palmer, 2015). The method of digital data curation can be an effective method for writing education, yet there is no such research result in implementing digital data curation into the field of writing education. In this paper, a data curation method is proposed for interactive learning for the college writing course in which students are encouraged to collect, analyze, and archive YouTube-based digital data for their interactive writing activities. University students are using Facebook, YouTube, blogs, or various social networks on a daily basis, so these interactive multimodal channels can be implemented as effective learning and teaching platforms for the students to search and preserve digital information for their writing resources.

The purpose of this study is to explore the use of interactive multimedia learning for college writing education and to present the instructional strategies of utilizing YouTube-based digital information for data curation in class writing. This study aims at proposing a case of university writing education that reflects the paradigm shift in writing environment. As the information service in this digital era has been diversified, and educators have also tried to utilize digital information actively, this study may present a concrete example of applying digital curation or data curation to college writing education.

Related work

The standpoint of writing education shifts from a formal view to a cognitive view and then to a social view again. The use of digital information and technology has also played an essential role in transforming the pedagogical environment for writing education. Writing is regarded not as a cognitive act but as a process of negotiating meaning in the environment, relation, and discourse community in which the individual belongs. This social view of writing education emphasizes the fact that writing is cooperation and dialogue between individuals (Oh & Kim, 2017). From this point of view, it has become difficult for students to obtain sociocultural background knowledge only based on print media, so the integration of visual media into writing practice can no longer be viewed as negative. Since writing education has been changing in a way that positively connects the time and society, it is essential for both the students and educators to have an interest in sociocultural issues (Fulkerson, 2005). With the development of the new digital technology in the every field of the society, college students usually search digitalized archives of the digital social media platform when they are doing assignments or team projects. Techno-savvy college students prefer surfing the web, social media, or YouTube in order to find a variety of learning materials to visiting libraries or reading books. Since 2016, the use of YouTube has increased for more than three times in South Korea, and YouTube has emerged as the top digital application among Korean users of all age groups (Sung, 2018). Figure 1 shows the statistical data on time analysis for the use of digital social media platforms.

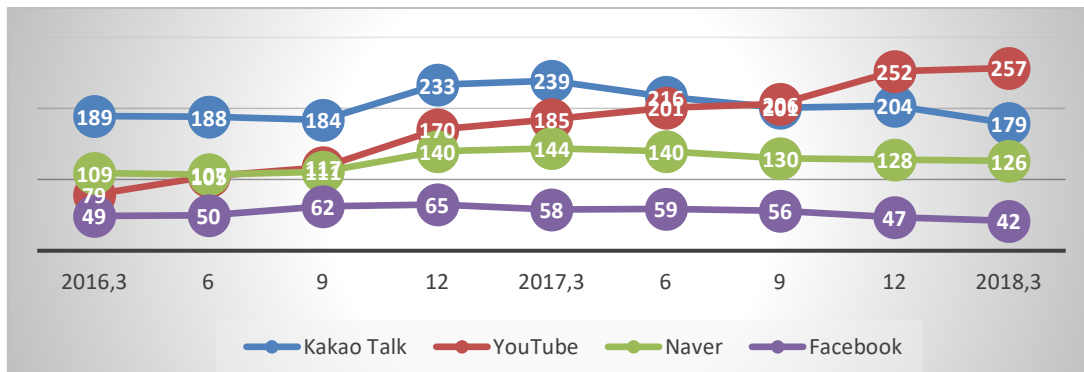


Figure 1. The time analysis per month of Korean Android app usage

Especially, Korean teens and twenties spent some 7.6 billion minutes on the YouTube during the month of April 2018 (Doo, 2018). The use of digital devices has also become inseparable part of their daily life for university students in Korea. Therefore, educators have tried to find ways how to convert their students' enthusiastic use of digital contents and smart devices into pedagogical realms. Educators have searched ways how to integrate the advantageous features of the digital content of YouTube in order to customize the motive and interest of their digital-wise college students. Thanks to their endeavor, among educators, YouTube has recently been considered as an effective platform that has a great potential to enrich the procedure of language learning and teaching with the diverse and innovative ways. Research results have revealed that the integration of YouTube can assist language learners not only to develop their language skills (Alimemaj, 2010; Comac, 2008; Derewianka, 2008) but also support them to acquire valuable resources and content knowledge (Park, 2017). The digital contents from YouTube can also be served as an effective channel to start discussions and develop ideas for writing tasks (Ghasemi, 2011; Jyun & Hong, 2010; Nejati, 2010; Rennie, 2012).

The procedures of writing activities of this digital era can be interpreted as the process of collecting, analyzing, and using data, which is similar to the process of digital curation or data curation (Faniel, Minor, & Palmer, 2015). Digital curation is an archiving activity that collects, manages and provides digital resources. Since the term, digital curation, was first introduced in 'Digital Curation: digital archives, libraries and e-science seminar' in 2001 in London, interest in digital curation has been increasing (Beagrie & Pothen, 2001). Originally, the term curation refers to collecting, preserving and exhibiting art works, but recently it has been used more broadly. Since a lot of libraries, archives, and museum materials are expanding into digital cultural heritage including data, there is a growing interest in digital curation in the various fields of the society (Gregory & Guss, 2011). Thus, the data-curated writing method can be suggested as the innovative instructional strategy for the college writing course through which learners are encouraged to collect, analyze, and archive YouTube-based digital contents for their interactive writing activities. The procedure of data- curated writing activities can be divided into several cyclic stages. Figure 2 shows the cycles of interactive writing activities within the discourse community using digital data curation.

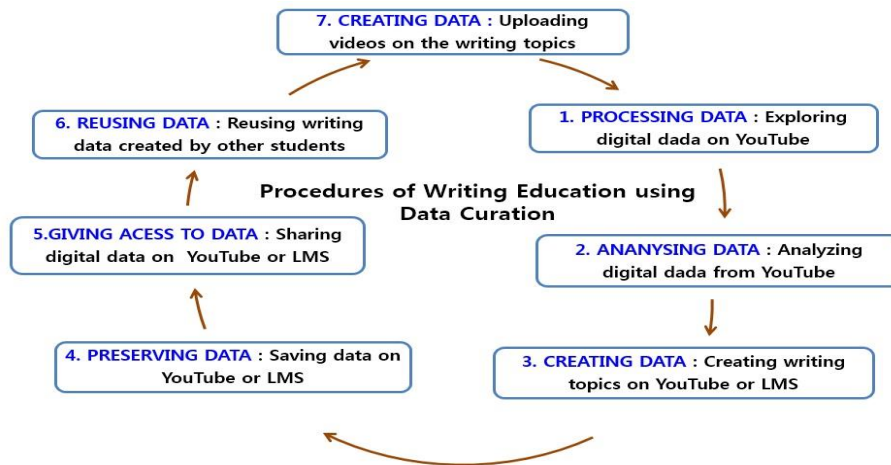


Figure 2. The cycles of interactive writing activities using data curation

Research context and procedure of classroom implementation

This study is based on an advanced writing course titled with Global Citizenship and Writing as Communication from a university in the middle part of Korea. This course is a compulsory course for liberal arts education. For the course, the global citizenship is served as a keyword for the students to discuss various issues in the global reality and express their thoughts and opinions. The course objectives aim to cultivate college students' communication skills by discussing various topics so that college students living in the global era can develop the sense of the global citizenship. The most important task in this course is for the students to search and share digital data from the various online sources such as YouTube within their discourse learning community and then to write articles in relation to the global citizenship through the digital data curation procedures. Figure 3 shows the classroom implementation of data-curated interactive writing activities.

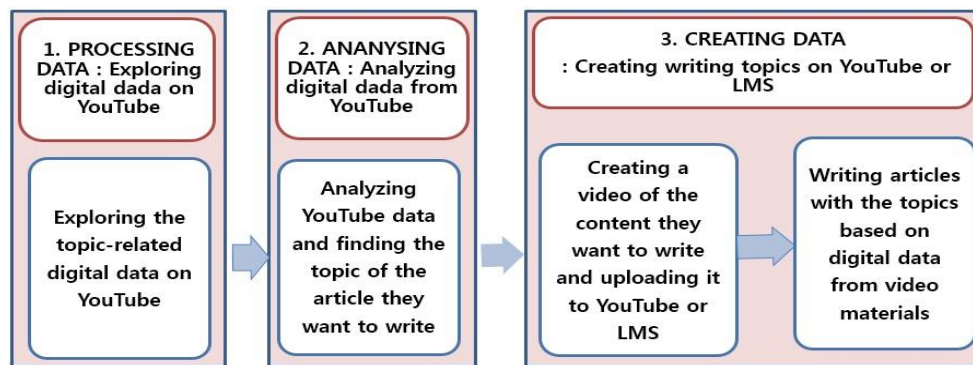


Figure 3. The process of classroom implementation for data curated interactive writing activities

In this class, students are good at using the Internet or digital devices and exploring various multimedia from YouTube, so they can actively utilize YouTube to investigate various issues about the global society. Students search YouTube and analyze the digital materials about the issues that they want to write and then make video outlines for the topic they should write. These video outlines created by the students correspond to the outlines of the articles that the students actually should write. The most important aspect of creating digital outlines and uploading them on the web is that these data can be served as valuable digital archives. Next semester, these digital curated data will be provided for the students who are going to take the same class. Figure 4 shows the example of digital contents that the students create and share for their writing project on YouTube or the course LMS.

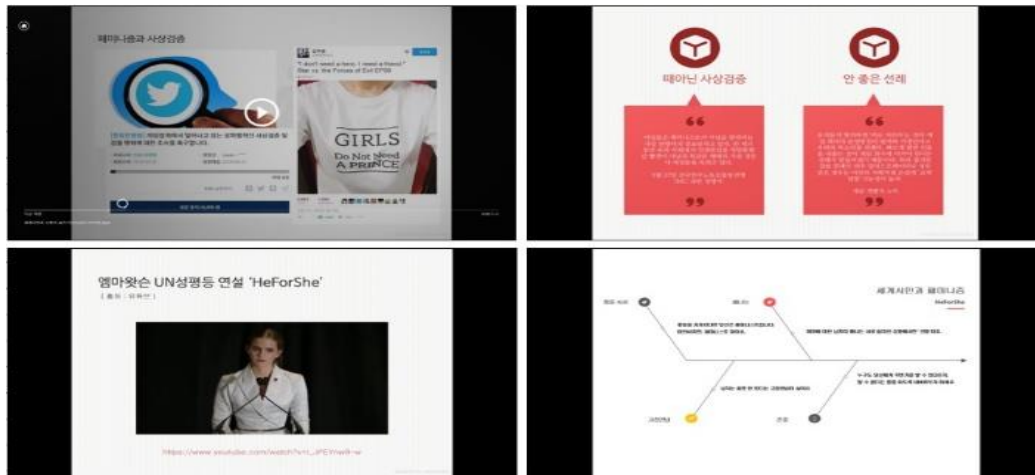


Figure 4. Examples of digital data that students create and upload to Smart LMS

Students access the existing YouTube data in order to write about global citizenship and then they search and analyze the data in order to create new digital contents related to the writing topics. It is important that the newly created data will be able to be recycled as important digital content resources for the learners of the next semester. In the process, students - as a member of the discourse community - become interested in a variety of issues in the global society and can have the experience of expressing their interests through written and visual modes. In the next semester, the students who will take the same course, Writing Communication with the Global Citizens, also enter the discourse community and analyze the digital content resources created by the students of the previous semester and then construct a recurrent structure that creates new contents for the students of the following semester. Through this cyclical structure, they constitute a learning community while developing social data for student-directed writing practice. This writing process can also provide the students with the opportunity to learn about membership of a discourse community as a global citizen. Students can engage in self-directed writing activities as a member of the discourse community through the experience of YouTube based data curation.

Discussion and conclusion

To find out students' awareness of using digital video materials from YouTube for their data curated interactive writing activities, questionnaire survey was conducted for the 55 students who enrolled in this writing course. The purpose of the survey is to investigate how the students use digital contents when they participate in the writing tasks and what they think about integrating YouTube-based digital materials and data curation process into their writing activities. As a result of the study, most of the students respond that they prefer to explore digital content materials from social networks when they search ideas for writing materials. They also respond that the data-curated writing procedures are informative and motivating. The results can confirm the idea that the use of data-curated digital archives on YouTube can support students to explore and share ideas for their successful learning tasks of the writing course and help them become members of the mutual learning community. It is shown that incorporating YouTube-based digital contents for writing activities can be a new instructional strategy that adopts digital data curation for creating digital archives. From this study, it is suggested that college writing education should reflect the students' needs and preference for digital learning and seek more innovative teaching and learning tactics to promote their learning motivation.

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Electronics for CLIL and STEM in EFL

Bio data

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Abstract

We report a case study of an EFL (English as a foreign language) course that used CLIL (content language integrated learning) for STEM (science technology engineering mathematics) intended for college freshmen in Japan having English language proficiency at CEFR (common European frame of reference) A2 or B1 levels. Part of the course material was from USA amateur radio license examinations, which contains questions on electronic engineering and legal regulations. Amateur radio is within reach of many high school students and above. Learners seeking careers on the world stage may benefit from this entry-level learning experience that shows learners the types of knowledge needed to become practicing engineers in society. Before class, learners learned about amateur radio by hearing, saying, reading, and writing material on an online learning system. During class, learners engaged in conversations that focused on phraseology and task completion.

Conference paper

Motives and requirements

We begin this report by stating the needs and motives of our learners, and the design requirements of our learning experiences. The remainder of this paper describes our materials and methods, followed by results and discussion.

At our university in Japan, our ELLs (English language learners) are freshmen having English language proficiency at CEFR (common European frame of reference) A2 or B1 levels. 75 percent of our 2600 students major in technical fields. ELLs seeking careers in engineering are motivated to use practical language (such as technical terminology) and sources of technical information (such as technical data and engineering standards). Our ELLs desire to take courses in EFL (English as a foreign language) that teach how to say phrases in technical contexts and to quickly find accurate information. To meet this need, and to allow our ELLs to socially succeed, we offer courses that use CLIL (content language integrated learning) for STEM (science technology engineering mathematics; Li, 2018; Yidi, 2018).

Engineers are professionals who possess knowledge of engineering theory and technology, plus knowledge of legal requirements and practical standards for applying that engineering knowledge. To meet these objectives, we include material from USA amateur radio license examinations (FCC, 2019; ARRL, 2019b). License exams for amateur radio (also known as ham radio) contain questions on electrical and electronic engineering theory (such as

Ohm's law), application of theory (such as choosing material for constructing antennas), and questions on rules and regulations (such as radio frequencies that we may transmit on). The questions and answers are publicly available, and are collectively known as the question pool (the questions in the license exam are randomly chosen from the pool).

Our engineering freshmen are familiar in their L1 with electrical and electronic theory, certainly at the lowest license level (the technician class license) and, for many students, even at the highest license level (the amateur extra class license). Familiarity with the theory allows ELLs to quickly grasp technical terminology (for example, our ELLs learn in a few minutes how to say and answer questions like "calculate the oscillation frequency of the following LCR circuit" in L2). This means that for electrical and electronic theory, the bulk of learning is L2 vocabulary. Few theoretical concepts are introduced. This area of learning is STEM but hardly CLIL (if it is, it is of content-specific vocabulary and phrases).

Few ELLs are familiar with practical applications of theory in radio telecommunications, so they need more time to understand the content. For example, students who have learned the theory only in books do not know what resistors look like (they take many shapes and sizes) and have no idea how to read resistance values printed on the packaging (some are numbers, some are colored bands). Engineering students are excited to learn new practical knowledge, partly because much of it is standardized internationally. Our ELLs learn through L2 knowledge that they can use in L1. This area of learning is STEM and CLIL of applied theory and practical technology.

Almost none of our ELLs have ever seen even in their L1 the law, rules, regulations, and codes pertaining to electrical and electronic engineering. Engineers are rarely delighted with legal issues, but grudgingly accept their importance. Our ELLs want to know where to find information on legal requirements, electrical codes, professional standards, and best practices (the last refers to design and implementation decisions that are considered common sense in the industry, and that are often legally encouraged although not mandatory). Because many of our ELLs have been trained in the GT (grammar translation) method, they need to read the entire L2 material and convert it into L1 before they can summarize it or find relevant information in it. We seek to train scanning (British Council, 2019a) and skimming (British Council, 2019b) so that ELLs can quickly find relevant parts of the document that they should read in depth. Our ELLs are not asked to memorize rules and regulations, because they are mostly irrelevant to college study. This area of learning is CLIL of reading strategies (that is, of meta skills). CLIL of law does not take place beyond becoming initiated into the format and writing style of legal documents that students will encounter later in their professions.

All our ELLs are capable of online learning because they take compulsory courses that use it. Many ELLs prefer blended learning (that is, a combination of online asynchronous learning and face-to-face real-time learning). Blended, flipped learning (Bergmann & Sams, 2012) allows active learning in the classroom. The passive or independent learning tasks can take place outside of class at times and places of the student's choosing. The active or interactive learning tasks can take place inside of class. Students happily complete homework as long as they are graded. Truth be told, our typical student is less concerned of learning the subject matter than earning high grades. The wily instructor guides students towards studying by offering many tiny rewards to many tiny tasks (but grading many tasks accurately and fairly can be labor intensive). Online learning or active learning do not save time or money. Instead, they help students achieve more by spending more time and thought.

Materials and Methods

Learners and course format

Our students were 93 university freshmen having English language proficiency at CEFR A2 or B1 levels. 63 students were engineering majors interested in learning electrical and electronic engineering through L2. 30 students were law and business majors interested in either electronics or law pertaining to technology.

Each class period lasted 90 minutes. Classes met 1 time per week for 15 weeks. Before each class, students accessed an online learning system to complete flipped learning assignments that prepared them for the next class. During class, students spoke with instructors, TAs (teaching assistants), and classmates. Students took midterm and final exams.

We designed learning activities using the 4C/ID model (van Merriënboer, Clark, de Croock, 2002). This model allows us to build upon simple skills that culminate in complex skills. The learning objective is language proficiency (a complex skill), while learners perceive their assignments as filling in blanks or saying short utterances (simple skills). Our course is designed such that it starts with simple skills which gradually integrates them in more complex activities.

Language material

We used the FCC question pool (ARRL, 2019a), the US CFR (code of federal regulations; FCC, 2019), and a UK website that teaches electronics (Coates, 2018).

We prefer to include material written by other people. Exposing learners to a variety of terminology and writing formats trains learners to understand various documents and utterances. Conversely, if we were to write all our material, our learners would be exposed to only one kind of terminology. Reliance on the publications of others, however, increases the risk of material becoming unavailable or outdated.

We mixed American and British English for the following 2 reasons.

- (1) Juxtaposing US and UK terminology shows to our learners that language varies within a technical field (e.g., "antenna" vs "aerial", "commercial power" vs "mains", "ground" vs "earth", "wrench" vs "spanner"). Some south-east Asian countries (where some of our graduates go to work) use UK terminology.
- (2) We wish to minimize the financial burden on our students. We found a UK website that teaches electronics for free. While the FCC question pool and some study guides are free (Benson, 2018; Chinn, 2016; eHam, 2016; Ham Radio School, 2018; Kemp, 2014; Tiley, 2016, Twigger, 2018), many study guides are not (ARRL, 2015; ARRL, 2016; ARRL, 2018; Romanchik, 2015; West, 2015a; West, 2015b; West, 2016).

Reading skills

ELLs practiced how to skim and scan. Students implicitly know how in L1. By learning the fairly rigid structure of technical and legal documents, implicit knowledge shifts to explicit knowledge, and students experience using it in L2. Shown below are examples of instruction intended to make implicit knowledge explicit.

(1) Explanation of skimming

Skimming means reading text quickly to get a rough idea or summary. Instead of reading the whole text, we look at the title, introductions, and any diagrams and sub-headings.

To summarize technical documents, we read 2 parts -- the beginning and the end. Technical documents have a common structure: (1) say what you will explain, (2) explain what you will explain, and (3) say what you explained. Parts (1) and (2) summarize the document. Read them to learn roughly what the text is about.

To read a level deeper, read the first and final sentences of each paragraph, because the core message is often located there.

Speed is important for skimming. Get a general idea of what the text is about.

(2) Explanation of scanning

Scanning means reading text quickly to find specific information, such as figures or names. Instead of reading the whole text, we search for keywords (such as technical terms) to find the part of the text we need to read.

Scanning is similar to using a "search" function in computer software.

Once we find the keyword in the text, we read the section that contains the keyword in order to learn more about the keyword.

Assignments on the online learning system guided students to skim and scan. Here are examples:

- (1) This question asks about electrical conductors and insulators. The student is directed to a section in Coates (2018), and asked some fill-in-the-blank questions.

Find the section headers. Read sentence 1 (the 1st sentence) of each section. Read fast. Do not stop to look up words in the dictionary. Read the words you know. Type words that best fit each blank below. Do not worry if your choice of words does not exactly match my suggested answers. As long as you understand, you are fine.

Electrical conductors are materials that allow electric current to _____ through them.

Metal conductors are often made of _____, aluminum, and some alloys.

Conductive gases are gases that can _____ current.

Insulators are materials that prevent the _____ of electric current.

- (2) This question asks about the reasons in a court ruling. The student is given a court ruling, and asked to some multiple-choice questions.

US federal law takes precedence over (that is, overrules or is superior to) state and local law. When federal law and state law disagree, then federal law prevails (that is, wins). Similar legal hierarchy exists between state law and city ordinances.

Look at the file "Final Judgment". In the main text of the document, look for the sentence containing the phrase "DECLARES" in uppercase (that is, capital letters) and the phrase "preempted" in lowercase (that is, small letters).

What can be inferred from this sentence?

- (a) the court declares accommodation for the city
- (b) the defendant preempted amateur communication
- (c) the city ordinance is overruled by federal regulations
- (d) the plaintiff is unreasonable

Writing skills

ELLs prepared 2 kinds of phrases for saying in class. Both kinds were written on the online learning system before class.

- (1) Engineering questions and answers based on the technical content in the reading material. For instance, "Look at the circuit diagram. If R1 is 50 ohms and R2 is 100 ohms, what is the combined value of R1 and R2?" During class, students picked from various circuit diagrams projected on the classroom wall, and asked other students to solve the problems.
- (2) Non-engineering, small talk passages. ELLs wrote 130-word passages on a different topic each week (e.g., your home town, a restaurant you recommend, should students work part-time?). Students wrote comments to each other's posts, and talked about these topics in class.

Listening skills

ELLs listened to recorded or streamed audio transmissions in CW (Morse code) and phone (voice). Examples of audio sources include amateur radio 2-way contacts (conversations between radio operators), WWV (a US government radio station that announces the time of day), and LAX approach (air traffic controllers talking to aircraft coming towards Los Angeles international airport).

ELLs were asked to distinguish between 1-way and 2-way transmissions (that is, broadcasts vs conversations) and between modes of transmissions (Morse code vs voice), but were not expected to understand or memorize the content of transmissions. The listening experience showed how signals can degrade over radio transmissions, and underscored the need to speak slowly and clearly using consistent phraseology in order to reduce ambiguity.

Speaking skills

During class, ELLs engaged conversations type (1) and (2) as shown in the "Writing skills" section above. The allocated time was 35 minutes each, with a break of 15 minutes in between to sing songs to learning linking and phonotactics (Suzaki and Kawai, 2017).

ELLs learned how to say mathematical equations in L2.

ELLs learned the ICAO phonetic alphabet, the way to say "A B C" as "alfa bravo charlie" (ICAO, 2019; not to be confused with IPA, 2019). In class, ELLs used the ICAO phonetic alphabet to spell their names to each other.

Results and Discussion

Survey results

Our ELLs responded to an anonymous survey after their final exam, but before their grades were known.

Based on a 5-category responses (ELLs were shown a statement and asked to choose from "strongly agree", "somewhat agree", "neutral", "somewhat disagree", "strongly disagree"), our ELLs were satisfied with our course (46% of students were "very satisfied", 33% "somewhat satisfied"), did not regret taking the course (53% "very meanwhile", 29% "somewhat meanwhile"), found the content useful (59% "very useful", 28% "somewhat useful"), and believe that TAs improve our class (57% "very effective", 35% "somewhat effective"). Most students understood how to complete assignments (40% "very clear", 37% "somewhat clear"), felt that writing tasks exercised their vocabulary (36% "very good practice", 42% "somewhat good practice"), yet felt that the assignment load was heavy (41% "very heavy", 35% "somewhat heavy").

Perhaps surprisingly to European teachers and students, to the statement "Generally speaking, we should use more English, because language skills do not improve if we use Japanese all the time", a total of 14% of students' reactions were "neutral", "somewhat

disagree", or "strongly disagree", suggesting a weak but non-zero attachment to the GT method.

Overall, students were comfortable in our course (48% "This class is just right for me, and I feel comfortable", 41% "This class is slightly advanced for me, but I do not feel uncomfortable"), and enjoyed the learning experiences (46% "I enjoy almost all (100 percent) of activities", 42% "I enjoy about two-thirds (66 percent) of activities"). Apparently the course offerings excessively scared some students (59% "This class is much better than I expected", 25% "This class is slightly better than I expected").

Based on write-in responses (ELLs wrote what came to their minds), the top benefits of course included (1) talking only in L2 to many people, (2) learning wholly in L2, (3) chatting with TAs, and (4) singing songs. The worst aspects of our course included (1) heavy homework, (2) repetitive questions, especially on electronic theory, and (3) feeling shy talking with strangers.

We asked ELLs the question " Help next year's student decide. What is this class about? Who should take this class? Who should avoid this class? Your comment may appear in next year's syllabus (course offerings). You may write in either English or Japanese." Below are some responses written in L2 as-is.

In this class, you should talking in English but you have not to be worry. You can talk if you do your assignment.

Originally I didn't like speaking English and talking with unknown people. However! When I realized, I was looking forward to this class.

Students don't like classroom lecture such as sitting all the time should take thins class.

The students who like talking in English, want to improve their English communication skills, and are interested in engineering should take this class. The students who dont't want to talk with strangers should not take this class.

This clas is for everyone,you do not mind your English skill .Let's enjoy conversation.

This class is for somebody who do not have courage to talk with foreign people but wants to enjoy English. Students can improve their English communication.

This class is for someone who want to raise one's English skills of English and the ability to communicate with someone. Someone who want to explain own opinion in English will be comfortable in this class. Someone who come to class only for some credits won't be comfortable and may be avoid.

Those who don't feel uncomfortable to talk with strangers should take this class. However, it becomes chance for making new friends for everyone. I am not the person like this, but this class is interested for me and enjoyed this class.

We can learn technology in English. So students who are interested in technology and English can enjoy this class but students who are not interested in them cannot enjoy this class. Also students who take this class have an oportunity of talking with friends and TAs, so they should talk friendly.

Who want to SPEAK English. Who have will to enjoy English class.

Subjective analysis and commentary

We were unable to measure the speed of skimming and scanning. We were, however, able to measure the accuracy of what we wanted our ELLs to skim and scan. Based on

introspective surveys, our ELLs (especially students who wished to avoid mistakes) spent considerable time reading the material we gave them.

The stability of the language material is a concern. The amateur radio question pool is publicly available, and remains unchanged until it is replaced with a new edition every 4 years. Some study guides are free, but unlike the question pool, study guides are the intellectual property of their owners. Japan's copyright laws require us to dynamically access them each time we use them, instead of statically reading downloaded material.

Unlike 15 years ago, our learners are friendly, gregarious, and eager to talk (a contributing factor may be the government-mandated focus on English language conversation in middle schools and high schools). The learners are held back by lack of vocabulary. When learning technical English, the primary focus should probably be terminology.

One way to improve the student-to-instructor ratio (and perhaps to decrease the workload of grading homework) is by hiring or giving course credit to upperclassmen as mentors and courseware developers. We solidify our knowledge by imparting it to others. Students with high English language proficiency who are exempted from English language courses are prime candidates for coaching underclassmen. Freshmen receive quality training, and sophomores enhance their mentoring skills. Our courses will benefit from courseware designed by students for students. The best ideas sometimes come from people closest to the learners. Learning is a creative democracy.

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The communication behaviors/styles of online users in cross-cultural exchange**Bio data**

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Abstract

The development of new media technology increases interaction possibilities among people of different cultures. However, people of different cultures have different communication styles in cross-cultural communication. Those styles may influence the efficiency of their mutual communication. This study aimed to explore how Taiwanese students communicate with students of other cultures and how their communication behaviors influenced their perception of online communication.

The proposed study included 19 Taiwanese English-major students from a Taiwanese university. They participated in a 10-week online cultural communication exchange with students from Japan and Colombia. The data was collected from the students' online interaction postings and via an after-study survey. Content analysis was used to identify the Taiwanese students' online communication behaviors and to examine how those behaviors influenced their perception of communication with the students from the other two countries. The findings of the study will be reported in the presentation.

Conference paper

Introduction

Nowadays, new media bring many possibilities for communication to people of different cultures. With their distinctive and unique nature, new media "[have] brought human interaction and society to a highly interconnected and complex level" (Chen, 2012, p.2). New media allow people to interact with others simultaneously by using individualized messages during the interaction. It not only affects the form and content of communicative messages, but also the way people understand each other during the communication process, particularly those from different cultural backgrounds. Communication media may impact mutual understanding between people of different cultures in different ways (Setlock, Fussell, & Neuwirth, 2004). How people of different cultural groups adapt and achieve mutual understanding becomes a great challenge in online communication.

For Chen (2012), thinking patterns, expression styles, and cultural context influence how people behave in online communication. The three factors are considered a manifestation of cultural values (Chen & Starosta, 2005). Some dimensions of cultural values, such as the distinct communication styles between high (e.g. Taiwan) and low context cultures, have encountered challenges with new media. Therefore, this study intended to investigate the following two research questions:

1. How do Taiwanese students communicate with students of other cultures in an

asynchronous, text-based, computer mediated-communication environment?

2. How do their communication behaviors influence their perceptions of online communication?

Methodology

The participants of this study were 19 Taiwanese English-major students who are currently studying at a university in Southern Taiwan. They took part in a 10-week online cultural communication exchange with students from Japan and Colombia in an asynchronous, text-based, communication setting. Their ages ranged from 20 to 23. All of them possessed basic computer skills and had social networking experience before the study.

The data was collected from the students' online interaction postings and via an after-study survey. Content analysis was used to analyze students' online interaction postings and SPSS software was used to analyze the after-study survey, in which the participants indicated their agreement with each item using a five-point Likert scale (1=strongly agree to 5= strongly disagree).

Findings

Regarding the first research question, the findings of the students' online interactions showed that when asked to give self-introduction, they seemed embarrassed to talk about themselves. Almost all of them shared general personal information (e.g. country (13 among 19), age (10), interests (17), the place where they live (7), major (7)) under the discussion of 'self-introduction' topic. Very few of them (6) posted their images in the discussion forum. Among the six who did, one used an avatar, and two used their Chinese names to represent themselves.

In their postings of other topics, they tended to write short messages. Instead of using words, most used images to assist in expressing their opinion. However, they rarely posted personal images (only 1). The images they posted were more about their pets, country sceneries, favorite singers, favorite movies, or food. They occasionally posted messages or images that were unrelated to the discussion topics.

The topics influenced the number of words they used in their postings. It appeared that participants were more comfortable discussing impersonal topics (e.g. hometown, culture) than personal topics (e.g. self-introduction), because the number of words in the former was greater than the number used in the latter. Familiarity with their exchange partners also had some effects on the length and depth of their discussions. Despite seeming to avoid sharing personal opinions, they expressed more after building relationships with some of the students from other countries through several postings. They also generated deeper discussion in their later postings. In addition to words, six participants used emoticons to help express emotions, while eight used emotional expression symbols (e.g. :) = smile).

Some common syntax types were found in their postings. For example, many of them used expressions such as "like ... too" or "not ... either" to show that they had something in common with their communication partners. Also most asked questions to keep the discussion ongoing. Their questions had several purposes—to discover more about others, to ask for others' opinions/thoughts, to ask for further information, to ask for suggestions or recommendations, and to ask for clarification.

Other syntax types that appeared in their records served the following purposes:

- Showing agreement
Example: I really agree with your opinions that we should do the job we love.
- Showing admiration
Example: I really admire what you do in your job.
- Expressing compliments
Example: The meaning of your name is beautiful.

- Expressing appreciation
Example: I really appreciate your thoughts.

All the above syntax types fall into the 'interactive' category of Rourke, Anderson, Garrison, and Archer (2001)'s template for assessment of social presence. In their template, the interactive responses were used to "build and sustain relationships, express a willingness to maintain and prolong contact, and tacitly indicate interpersonal support, encouragement, and acceptance of the initiator" (p.7).

The other syntax types that were found in the postings and could be classified into the interactive category were to give blessings and expectations, which were not presented in Rourke et al.'s template.

Example: I sincerely hope that you can achieve your dreams. (give blessings)

Example: I'm looking forward to your replying. (expectations)

In addition to the 'interactive' category, there are two other categories that indicate communicators' social presence in Rourke et al.'s template (2001)—affective and cohesive. Although most participants expressed their emotions frequently to show their affection, very few disclosed themselves in their postings. Moreover, only one who was from Hong Kong addressed her interlocutors by name in her postings. Also, one of them expressed appreciation in all her postings, which might appear odd to students of most Western countries.

The above findings indicate that the Taiwanese students shared some similar communication behaviors with Western students as the data in the study of Rourke et al. (2001) was situated in Western contexts. However, this study identified some differences that might cause communication difficulties between Taiwanese students and those from Western countries, which warrants further study.

As to the second research question about the impacts of the Taiwanese students' communication behaviors on their perceptions of online communication, the findings of the survey showed that, in general, they had good perceptions of this cross-cultural experience (Mean=2). And they thought most of their opinions were well received by students from other countries (Mean=2.29). However, they less strongly agreed that the communication could allow them to have clear perception of their communicators (Mean=2.76). Yet most agreed that the teacher's involvement could be beneficial to their perceptions of being a member of the community (Mean=2.12).

After comparing the results of the survey and interaction records, it was found that the students who used more strategies in their communication (e.g. use emoticons or expression symbols, use more syntax types, self-disclose more) had better perceptions of this communication experience and their partners. And those who used fewer strategies in their communication (e.g. never ask questions, give superficial or short messages, give replies or post messages late) tended to have worse perceptions of this experience and their partners.

In addition, the interaction records also showed that the Taiwanese students whose culture is high-context tended to send initial replies to the postings including images after the start of a new topic. The postings with more images seemed to attract more attention. However, they didn't necessarily put the same number of images in their original postings.

Conclusion

The above discussion suggests that although the Taiwanese students are from a high-context culture, they share some common communication styles with others from low-context cultures in an asynchronous, text-based, computer mediated-communication environment. And some seem to use more strategies to keep the communication interactive. However, they use fewer strategies to maintain affection and cohesion in communication, which might affect their perceptions of online discussion. Due to its small

scale, the results of the current study may not be generalizable. In addition, this study only looked into how Taiwanese students' communication behaviors influence their perceptions of online communication. Future researchers could examine how the communication behaviors of students from other cultures influence their online communication, which should be beneficial to mutual understanding in cross-cultural communication. Finally, this study didn't examine how this exchange experience impacted the involved students' language skills. Future studies could look at the aspect of language skills as performed by learners in cross-cultural exchanges.

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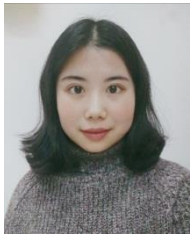
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A comparison of the machine learning technique-based computational models of eye movement data

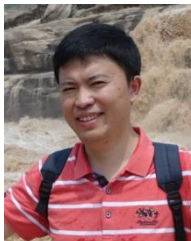
Bio data



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Abstract

When studying the ecology of the learner, it is necessary to pay attention to the learner's cognitive ability. Attention-control is a key cognitive ability in second language learning, because it is considered as a necessary and sufficient condition for conversing input to intake. Computational modeling of attention control can reveal varied cognitive mechanisms in L2 learning, and provide accurate quantitative evidence to support computer-assisted behavior control and training. Therefore, the computational models based on eye-movement data require accurate simulation and sufficient interpretation of the attention-control patterns. In this paper, we compare the performance of seven commonly used eye-movement-data analyzing methods based on a data set composed of 16 elementary school students' eye-movement records. To reveal the attention-transfer patterns, the data processing technique is required to fit the eye-movement data, as well as to explain the patterns that correlate with the specific goals. Thus, the evaluation of the referred techniques should be considered in two facets: the regression and predicting accuracy of the data, and the causal-result explaining ability of the data and a specific goal. The results show that, among the referred techniques, the prediction model from Decision Trees algorithms can generate the most intuitive explanatory rules of the behaviors, and at the same time achieves the prediction accuracy of 64.29%.

Conference paper

Introduction

Education can be seen as an ecosystem (Brown, 2000; Bernat, 2008). Elements such as teachers, students, teaching media, and teaching resources interact with each other and evolve into a dynamic ecological balance system. Larsen Freeman believes that language learning can be considered as a complex ecosystem (Cameron & Larsen-Freeman, 2007; Larsen-Freeman, 1997), which consists of two subsystems: cognitive ecosystem and social ecosystem (Larsen-Freeman, 2007; Freeman & Cameron, 2008; Larsen-Freeman, 1997). This is the inclusiveness of the current cognitive and social views of second language acquisition, and thus has a more comprehensive explanatory power for the nature of language and its development. However, regardless of cognitive ecosystem or social ecosystem, "cognition, consciousness, experience, embodiment, brain, self, human interaction, society, culture, and history are all inextricably intertwined in rich, complex, and dynamic ways in language" ("Five Graces Group" et al., 2009).

One way to balance learners ecologically is to promote personalized learning and focus on their cognitive-related abilities (Freeman, 2008). Individual factors that influence language learning include many cognitive individual differences, such as cognitive abilities which refer to understanding, perception, concentration, attention and memory (Yang et al., 2014). Attention is a critical factor in learning and information processing (Cardoso-Leite & Bavelier, 2014; Gottlieb et al., 2013), and many studies claimed that attention in second language acquisition (SLA) is a necessary and sufficient condition for converting input to intake for further mental processing (Ellis, 2005; Schmidt, 1990).

As a widely used method in psychology research (Cassimatis, 2005; Anderson et al., 2004), computational modeling is recommended for use in the study of complex language ecosystems (Cameron & Larsen-Freeman, 2007; "Five Graces Group" et al., 2009; Freeman & Cameron, 2008). Eye tracking, as a research method, has been used for over 100 years in the field of language learning (Jacob & Karn, 2003), and is a commonly used technique to monitor participants' attention-transfer and attention-maintain patterns (Stickler & Shi, 2017). The classic methods of eye-movement data processing are commonly classified as statistical techniques.

However, in recent years, machine learning techniques have been applied in building computational models for eye-movement data. Cop et al. (2017) examined how noun reading by bilinguals is influenced by the orthographic similarity with their translation

equivalents in another language through restricted maximum likelihood estimation (REML). Fernandes et al. (2017) used a computational approach based on machine learning algorithms (Naive Bayes, MLP, Support Vector Machine (SVM), K-nearest Neighbor, Decision Tree (C4.5), Random Forest) to model the decisions regarding euthanasia. In their research, they used WEKA software and NICEsim (SVM, MLP) tools. Baranes et al. (2015) constructed a model to predict the epistemic states (curiosity, confidence or surprise) through random forest algorithm, which took input a vector of eye-movement parameters. Dmitry et al. (2011) used Naive Bayes, Logistic Regression and Support Vector Machine algorithms to improve the accuracy of detecting mild cognitive impairment (MCI). The research collected the eye-movement data such as fixations, saccades, and re-fixations that occurred in the Visual Paired Comparison (VPC) task as the predicting models' parameters. However, the aforementioned machine learning techniques are mostly used in psychological research area; few studies are referred in SLA. Yang et al. (2018) used the SPADE algorithm to mine the different eye-movement trajectories of different students when they were required to implement an attention-control task.

In summary, applying machine learning techniques to build up computational models for eye-movement data is a main trend. In this paper, we compare the performance of the seven commonly used eye-movement-data analyzing methods based on a data set composed of 16 elementary school students' eye-movement records which were collected from a language listening task. Our purpose is to evaluate the referred techniques' predicting and explaining ability regarding the relationship between visual attention-control and a specific language ability that is considered in the SLA task.

Data collection

Voice-guided visual attention data collection

An eye tracking test was designed to investigate participants' attention-control ability in SLA. The eye tracking test was implemented through Tobii T120. Sixteen primary school students (8 boys, 8 girls) were invited to participate in the experiment, and their ages were 6-7 years old (Mean=6.31, SD=0.48). All participants were regular first-year students from a primary school in Chengdu, Sichuan Province, and performed in the normal range on their first language. The experiment was performed three times for each participant in total. We prepared an English reading audio (about 4 minutes) and slides with its corresponding written words, and participants were required to pay visual attention to the corresponded written words displayed on the screen when they were listening to the audio. The audio involved 12 slides; each slide contained one sentence and its corresponding oral reading material played 15% slower than the original speed of the recording, as illustrated in Figure 1. It should be noted that the words in the audio and slides were novel words for the participants to avoid the possible influences from the participants' different lexical management degree. To exclude the unexpected interferences maximally, words were shown in black and placed in a white background. Green highlighting blocks were used as a heuristic hint for the participants to control their attention to follow the pace of L2 audio.



Figure 1. The English video used in the eye tracking test

Set phonological awareness performance as an associated target

After the attention-control task, the students were asked to complete another task that examined their phonological awareness performance. It can be seen that the attention-control test was designed to collect the participants' attention-control data regarding the voice stimuli of L2. Specifically speaking, the voice stimuli of L2 in this test refer to the phonological features of the spoken English that were different to those in their first language (Mandarin). Thus, the performance of phonological awareness is designed as the goal function of attention-control experiment.

The phonological awareness task was designed as follows: 1) participants were asked to listen to a sentence first, then required to repeat the sentence; 2) each sentence needed to be repeated contains at least 7 words. Participants' repeating performance was computed through formula (1), in which $PASR_{i,z}$ refers to student i 's phonological awareness score rate (PASR) in the z th experiment, $R_{i,j,z}$ refers to the number of words that student i repeated from sentence j in the z th experiment, and $|S_j|$ refers to the length of sentence j . The PASR is a normalization of the participants' phonological awareness performance in each experiment.

$$PASR_{i,z} = \frac{1}{2} \sum_{j=1}^2 \frac{R_{i,j,z}}{|S_j|} \quad (1)$$

Since the machine learning algorithms used later are supervised classification algorithms, the labels are needed to be pre-set. In this paper, phonological awareness performance was the objective of attention-control, and therefore the labels were set like this: If $PASR_{i,z} > ALL_z$, it is marked as positive, otherwise negative. The ALL_z in formula (2) represents the average phonological awareness score of all participants in the z th task.

$$ALL_z = \frac{1}{16} \sum_{i=1}^{16} PASR_{i,z} \quad (2)$$

Comparison of the eye-movement-data processing techniques

Eye-movement parameters selection

Lai et al. (2013) categorized eye-movement parameters into three scales: temporal, spatial, and count. Temporal scale includes measurements that indicate time spent in specific eye movements, such as total fixation duration, average fixation duration, and time to first fixation. Spatial scale includes measurements related to "locations, distances, directions, sequences, transactions, spatial arrangement or relationships of fixations or saccades", such as saccade length and fixation sequence. Count scale includes measurements that indicate the frequency of specific eye movements, such as total fixation count and inter-scanning count. In addition to gaze and scanning, pupil size and blink rate are other common eye-movement features (Alemdag & Cagiltay, 2018).

The stimulus materials in eye-movement experiments can be static materials (Pictures, PDF documents, etc.), and dynamic materials (Videos, external programs, etc.). Video is a commonly used stimulus material, but it is very difficult to divide an area of interest (AOI) in a video, especially if the visual elements in the video are very unevenly distributed. Methods of eye-movement data analysis require researchers to divide AOIs on stimulus materials, generate relevant eye-movement parameters for AOIs, and then use the some methods to analyze or model those parameters. Thus, based on the traditional AOI-division method, there is only one large AOI can be set in our experiment: the text area of the video. Nine parameters and descriptions generated from interest areas are shown in Table 1.

Table 1. Eye-movement parameters and descriptions

Parameters	Descriptions
TFF	The time from the start of the stimulus displays until the test participant fixates on the AOI for the first time (seconds);
FB	Number of the times the participant fixates on the media before fixating on an AOI for the first time (count);
FFD	Duration of each individual fixations within an AOI (seconds);
AFD	Average of duration of each individual's fixations within an AOI (seconds);
TFD	Duration of all fixations within an AOI (seconds);
FC	Number of the times the participant fixates on an AOI (count);
AVD	Average of duration of each individual's visit within an AOI (seconds);
TVD	Duration of all visits within an AOI (seconds);
VC	Number of visits within an AOI (count);

Note: Each visit refers to moving out of an AOI from the first gaze point to the next gaze point.

The machine learning methods

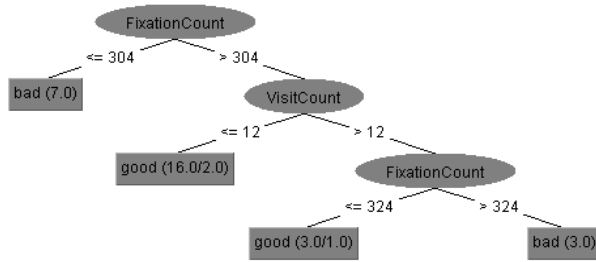
By employing machine learning techniques, complicated regression/prediction model should be constructed between the eye-movement feature and the goal function (label). In this paper, supervised classification algorithms were used to extract attention-transfer patterns and then predict students' phonological awareness ability in SLA. Supervised classification algorithms commonly used in eye-movement-data analysis are K-Nearest Neighbor (kNN), Nave Bayes (NB), Logistic Regression (LR), Decision Tree (C4.5), Random Forest (RF), Artificial Neural Network (ANN) and Support Vector Machine (SVM). In the study, we compared the performance of these seven methods. The eye-movement parameters used in this paper were mentioned in Table 1. About 2/3 of the data were taken as training set and 1/3 of them were used as test data. We used open-sourced software WEKA (Witten et al., 2016) as the tool to implement the classification task. The regression and prediction performance of the referred 7 kinds of techniques was shown in Table 2.

Table 2. Statistical evaluation of models from seven learning algorithms

	Train		Test	
	Accuracy	Precision	Accuracy	Precision
LR	82.76%	82.35%	71.43%	70%
NB	72.41%	78.57%	71.43%	83.33%
ANN	86.21%	87.5%	78.57%	77.78%
kNN	100%	100%	57.14%	62.5%
C4.5	89.66%	84.21%	64.29%	66.67%
RF	100%	100%	71.43%	75%
SVM	75.86%	73.68%	64.29%	66.67%

Note : Accuracy: the ratio of the number of samples correctly classified by the classifier to the total number of samples of a given test data set, Precision: the proportion of instances that truly belong to a class divided by the total instances classified as that class.

Unfortunately, among those techniques, only one algorithm (C4.5) is white box, and can generate the causal-result rules mentioned in the last section, while others are black-box techniques. Thus, compared with other methods, the method based on decision tree algorithm (such as C4.5) shows better performance, which produces decision tree rules (as illustrated in Figure 2) with the most intuitive behavioral interpretation rules, and achieves 64.29% prediction accuracy (as shown in Table 2). However, the rules generated by C4.5 did not have much value in practice, and it is still hard to build an explanation rule between children's attention-control behavior and their phonological awareness performance.



(a) Decision tree.

```

IF FixationCount <= 304 THEN decision=bad
ELSE IF FixationCount > 304
  IF VisitCount <= 12 THEN decision=good
  ELSE IF VisitCount > 12
    IF FixationCount <= 324 THEN decision=good
    ELSE IF FixationCount > 324 THEN decision=bad
  
```

(b) Rules.

Figure 2. Decision tree rules from the learning algorithm

Discussion

To balance learners ecologically requires to make focus on learners' cognitive-related abilities, such as attention control. Machine learning techniques based computational modeling of the attention can provide re-balance strategies quantitatively. In this paper, 16 students' eye-movement records were used as attention-control data sets, and the performance regarding 7 kinds of machine learning-based computational models was compared.

Traditional statistical methods can only focus on a small number of eye-movement parameters associated with research hypotheses, and cannot quickly find large feature sets and feature combinations. However, machine learning-based computational models can generate more accurate regression/prediction relations between parameters and hypotheses, but with different explanatory ability. Although, the white-box technique named C4.5 in this paper can generate causal-result rules, it still cannot generate a guidance rule to restore the ecosystem balance for a learner. To reveal how attention-control correlates with a specific performance in SLA, more machine learning-based computational models of biological data should be explored, not only integrate with eye movement data, but also other biological data sources, such as electroencephalography (EEG), event-related potential (ERP) and electrocardiogram (ECG) , etc.

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The impact of guanxi, face and FLL self-concept on students' engagement in a WeChat-supported vocabulary learning environment

Bio data

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Abstract

This study investigated the socio-cultural factors that influenced students' engagement in a WeChat-based English vocabulary learning platform. In a *Comprehensive English* class, a group of 21 Year-1 college students were required to use new vocabularies to make sentences and post them in their Wechat moments. They were also encouraged to read and comment on one another's postings, involving in an interactive process aiming to consolidate their vocabulary learning. The WeChat logs showed students participated differently in the environment, and the interview data indicated guanxi, face and Foreign Language Learning (FLL) self-concept are the major factors that influenced students' engagement, either positively or negatively, in the platform. Implications of the study are discussed.

Conference paper

Introduction

WeChat (Weixin or “微信” in Chinese) as a social media has gained great popularity among Chinese people and deeply changed their lives (Gan & Wang, 2015). In the college classrooms, students are often witnessed to play with their mobile phones, chatting with their friends or browsing news from the WeChat moments (friends space), which usually poses a major distraction or threat to classroom learning. As forbidding students from using mobile phones in class is neither practical nor feasible, it is more fruitful to exploit the opportunities of WeChat in support of students' learning, be it inside or outside the classroom.

With the ubiquity of technology in education, the benefits of networked computers or mobile phones in assisting language learning and teaching have been widely reported (Bax, 2003, 2011; Warschauer & Kern, 2000). However, research on the mechanisms behind the benefits is still under-investigated (Reinders & Stockwell, 2017), and studies shall not only focus on the advantages of technology, but also the affordances and constraints (ibid). Despite its popular use in China, WeChat is not originally designed for foreign language learning. There must be opportunities and challenges when WeChat is utilized as a learning platform/environment to facilitate a group of Chinese EFL learners' vocabulary learning.

Stockwell has rigorously investigated mobile phone-based vocabulary activities, and his main foci include a comparison of time spent on the task via mobile phones or computers (2007) as well as learners' usage patterns of mobile platforms (2010). In China, Wang (2018) conducted a quasi-experimental study examining the use of WeChat and English Learning Apps in support of students' vocabulary learning. The results showed different achievement groups had different preferences towards mobile learning and their performances on vocabulary assessment were difference as well. Nonetheless, Stockwell and Wang studies have not elucidated the deep mechanism that underpins students' engagement in or performance of the task. This study intends to investigate the socio-cultural dynamics that may influence students' engagement in the vocabulary learning activities. Two related questions are to be addressed: (1) How will the students participate in the vocabulary learning activities in the WeChat-supported environment? and (2) What are the socio-cultural factors that may affect students' engagement in the platform?

Research Design

This study was conducted in a Sino-British joint educational program at a university in Shanghai, China. A group of 21(11 females and 10 males) Year-1 students were registered in a course entitled *Comprehensive English*, which was delivered in a 90-minute session everyday from Monday to Friday over a 18-week long semester. *Comprehensive English* is a foundational course designed to strengthen students' competence in vocabulary, grammar and reading. The program students are mostly those who failed the Chinese Gaokao (Matriculation test), thus relying on the joint program to continue their study in higher education. As vocabulary learning is a primary task of the course and the students use mobile phones heavily in and outside the class, the teacher required the students to take advantage of the WeChat for vocabulary learning. Specifically, students were equally divided into five groups (except for one group) and each member of the group needed to use three new vocabularies he/she learnt from the textbook to make sentence(s) and post those sentences in the Wechat moments (friends space) after class. Since WeChat moment is an open space where all friends (including classmates, teachers, even parents and relatives) have access, a students are therefore, encouraged to not only complete their own task but also read and give comments to their classmates' sentence-making. It is hoped, through these online activities, students can better understand the meaning of the vocabulary, the contexts in which the vocabulary is used, and more importantly, they learn from one another.

The data of this paper included (1) students' postings in the Wechat moments (sentence-making, comments, responses, click of liking/appreciation, etc) throughout the semester, which provided a holistic picture of students' engagement in the environemnt; and (2) interviews with focus groups of students at the end of the instruction (N=9; each lasted for 20-25 minutes), which shed light on the socio-cultural dynamics that affected students' engagement in the WeChat-supported environment.

Findings

Students' general engagement in the WeChat environment

We have kept the mobile phone logs to track students' participatory behaviors in the WeChat environment. Since sentence-making is a required assignment for the course, all the students (n=21) did it accordingly. However, their postings vary in number and length. Some students deliberately put three vocabularies into one sentence thus made only one entry each time; and some students preferred to use one or two vocabularies in one

sentence and thus made two/three sentences/entries each time. In total, students made 571 sentences with a Mean of 27.19 and a SD of 8.84. One big incentive to use the platform is to encourage students' online interaction or peer comments on one another's sentence-making. However, the dataset revealed that students did not participate actively in these activities and they differed greatly in terms of receiving (Total N=99, M=4.71, SD=5.58) and giving (Total N=91, M=4.33, SD=4.75) peer comments. There is also a click-liking function in WeChat moment (showing appreciation to others' postings by simply clicking a heart-shaped button); it was found that even for the liking behavior, the number of clicks was sparse. Therefore, it constituted a line of inquiry to understand why students were engaged in such an uneven pattern.

The socio-cultural dynamics that affected students' engagement

Altogether, nine students, three from each of the high, middle, and low-level academic performance groups, were selected and invited to a semi-structured interview. The interviews focused on students' experiences, feelings and actual behaviours working on WeChat during the 18-week long instruction. The transcripts of the interview data were analysed and three main socio-cultural factors, namely, guanxi, face and learners' FLL self-concept, emerged that helped to explain students' varied engagement in the WeChat-supported vocabulary learning environment.

The impact of guanxi.

Guanxi has been defined as "dyadic relationships" based (often implicitly) on mutual interest and benefit (Yang, 1994). Usually, people are willing to offer a favor or help to those with whom they share good guanxi. This socio-cultural element has been deep-rooted in China, and found its specific relevance for student engagement in this study. In the interviews, seven out of the nine students clearly expressed they have somewhat enjoyed "good guanxi" with their class instructor (Miss Q), which contributed enormously to their completion of the sentence-making assignment. "*Miss Q is nice and patient, just like my big sister, I never failed to finish her assignment although I may skip assignments given by other teachers* (Excerpt #1 SsLL1). Such a guanxi element is also reflected by a student-to-student relationship. For example, when explaining why peers' comments are sparse, SsHL2 said "*I only follow/comment on my friends with good guanxi ... we have different guanxi. For some you really do not care, and I won't bother writing feedback...*" (Excerpt #2, SsHL2). The WeChat logs did reveal that most students tended to interact within a smaller group size of 3-6 students, whom they regard as close friends or friends of good guanxi.

The impact of face.

Leung & Chan (2003) defined face as "respect, pride, and dignity as a consequence of his/her social achievement and the practice of it". Chinese people usually have a strong consciousness towards face and face-keeping, face-gaining or face-losing are important concerns of their life. Students may feel encouraged to invest time and efforts for the environment because of face-gaining. "I often read my classmates' sentences, and it is not difficult for me to spot out their mistakes, mainly grammar [mistakes]; I feel haha [being proud], I can tell him [the student who committed the mistake] now... " (Excerpt #3, SsHL1); in addition, this high-achieving student hoped that "what I wrote [sentence-making] could be the model of the class" (Excerpt #4). Obviously, doing something correctly aroused a sense of pride, and students' engagement enhanced with the practice of the face-gaining activities. Interestingly, the worry of face-losing or face-maintaining can also be the prompts for improved sentence-making in the WeChat environment. "There are so many friends who can read me ... when I do the sentence-making, I consult dictionaries... ask my roommates to check before I post" (Excerpt #5 SsML1). Likewise, when there is a threat of face-losing in public, a student (SsLL2) withdrew the idea of commenting on or clicking a liking button because if "you did nothing, you maintain face".

The impact of FFL self-concept.

Learners' foreign language learning (FLL) self concept is defined as "an individual's self-descriptions of competence and evaluative feelings about themselves as a foreign language

learner (Mercer, 2011)". A learner's FFL self-concept is believed to exert great influence on his/her behaviours and impetus towards foreign language learning. In this study, WeChat offered a special space where every learning behaviour, be it good or bad, can be recorded and shown to many others openly. This function affected students' engagement either in a positive or negative way, depending on the student's FLL self-concept. For example, SsLL3 expressed that she "feel extremely uncomfortable" towards the vocabulary task, "How can you share some strange stuff [English sentence-making]' in the WeChat moment? It is a place you share your life, your travel, and food ..." (Excerpt #6). Accordingly, this student finished her assignment passively throughout the semester, and she did not give any comment to others and paid "almost no attention to others' postings at all". The interview probed further into the reasons and asked her to describe herself as an English language learner. She said, "I don't like English, you know, I often make mistakes in English, especially in writing ... I expect [that] use of Wechat is to relax me, not to make me nervous with English (Excerpt #7)". It seemed that SsLL3's passive involvement in the WeChat environment could be attributed to her weak, evasive FLL self-concept. In contrast, a growing, progressive self-concept may enhance online engagement as SsML2 said "I don't feel ashamed when Prof. Z pinpoint my mistake in sentence-making in WeChat moment ... yes, people all know me [in WeChat friend circle], and they know I am making progress bit by bit " (Excerpt #8).

Implications

Technological tools such as WeChat can be harnessed to support student foreign language learning. The study showed that the pervasiveness and convenience of WeChat made the vocabulary learning activities possible among a group of college students and they accomplished their assignment accordingly. However, each tool has certain functions that may work or fail depending on their alignment with the pedagogical or socio-cultural dynamics in context. Not all students will find a technology-supported learning environment beneficial; sometimes, it can be detrimental, such as the case with the SsLL3 who has possessed an under-developed FLL self-concept. The paper seemed to highlight a need of a non-threatening, democratic learning atmosphere before and in the process of implementing technological tools. There also seemed a lot of opportunities when guanxi, face, and self-concept could be activated and worked positively towards learning and online engagement. It is hoped that this paper will shed light on how CALL can be designed more effectively aligning learning goals with socio-cultural dynamics for practitioners and course developers who are interested in using technologies.

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Effect of AWE-based writing on EFL learners' oral performance at different proficiency levels

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Abstract

The research studies the effect of summary writing, through online Automated Writing Evaluation (AWE) system, on improving English as a foreign language (EFL) learners' oral production at different English proficiency levels. With development of computerized language evaluation, nowadays, online AWE tools are widely used in teaching and learning process. The authors' previous studies have shown that AWE tools are beneficial for improving EFL learners' writing quality and reducing speaking-related test anxiety. The current study aims to measure if EFL learners of different proficiency levels are affected differently in the context of using AWE system. The study was carried out in one-week intervals from September 2018 to January 2019 and it involves 288 non-English major participants at an English audio-video speaking course (EVASC) at the authors' university. At the post test for integrated listening-writing-speaking, students were required to write a summary through the *Pigai* system (www.Pigai.org, a web-based AWE tool which has been widely used in China) prior to a one-minute oral personal statement of the same topic. The findings from students' responses to the post-test questionnaire survey reveal that they showed very positive perceptions of AWE-based summary writing before the speaking task. However, there are some differences among different-level students. The intermediate-proficiency-level students gained higher recognition on the effect of AWE-based summary writing on their oral performance than those higher or lower achievers. What's more, through data analysis, it reveals that the AWE-based summary writing has a positive impact on improving their oral language discourse.

Conference paper

Introduction

Feedback has long been recognized to have played a central role in EFL learners' learning and achievement (Carles, Salter, Yang & Lam, 2011; Ellery, 2008; Ellis, Sheen, Murakami & Takashima, 2008; Higgins, Hartley, & Skelton, 2002; Nakata, 2015; Nicol & Macfarlane-Dick, 2006; Sendziuk, 2010; Shute, 2008). With rapid development of computer technology, various online writing feedback software – Automated Writing Evaluation (AWE) tools have been developed and widely used in classrooms. Meanwhile, summary writing, as a content-based output task, has been testified with positive influence on

producing language (e.g., Ringbom 1992), including EFL learners' oral production (Lu et al. 2015). This paper studies the effect of summary writing, through an online AWE system, the *Pigai* system (www.Pigai.org), on improving EFL learners' oral production at different proficiency level.

Review on AWE tools

In 1960s, automated essay scoring was developed to ease the burden of scoring a large number of students' writing in America. The first AWE software, Project Essay Grade (PEG) was developed to predict the inner quality of the writing drafts (Chung & O'Neil, 1997, Kaja Zupanc, 2017). In the last decade of 20th century, some broader automated writing evaluation programs had been developed with advance of intelligence technology, especially natural language processing and intelligent language tutoring system (Chen, 2008). Some automated essay scoring programs, such as Criterion with the engine of e-rater, and MY Access with the engine of Intellimetric, are able to evaluate essays with more complex dimensions including lexical complexity, syntactic variety, discourse structures, grammatical usage, word choice, and content development. Whereas in mainland China, it is not until recent 10 years that some AWE tools have been developed and implemented for assessment purposes in EFL teaching, though the first one, E-writer, was developed in 2005 and capable of assessing essays from language, content, discourse organization and technical specifications. Now, the most popular and widely used web-based AWE tool in China is the *Pigai* system (which has already exceeded 20,000,000 users). It can provide instant feedback, formative assessment and diagnostic writing reports by aligning students' writings with standard corpus (Ranalli et al., 2017). However, the rapid growth of AWE tool classroom implementation has often accompanied with fierce discussion and opposition. The corpus of the current research was collected on the *Pigai* system.

There are two main strands of the AWE research. One is the research of technological affordances of AWE, though no consensus has been reached till now (Li, 2019). For instance, Bai and Hu (2017) acknowledged the limited functionalities of AWE, which, as guided, could be the supplement of teachers' feedback. Zhang and Hyland (2018) highlighted different sources of formative assessment and consented the partial usefulness of AWE tools. The other strand concerns with students' perceptions towards AWE systems. Wang et al. (2013) studied enhancement of learner autonomy awareness when using AWE system; Lai (2010) and Lu (2018) investigated computer anxiety about AWE system; Li, Link & Hegelheimer (2015) and Zhang & Hyland (2018) studied learners' attitudes towards AWE using; Wilson & Czik (2016) researched computer self-efficacy of AWE using.

Three well-established approaches are widely used in EFL writing courses: product approach (Brown, 1994), process approach (Tribble, 1996) and genre approach (Hyland 2003, 2007). Barrot (2018) summarized limitations of these methods and advocated teachers to integrate sociocultural, pragmatic and transformative factors into writing class. Some previous studies have also indicated that summary writing may benefit EFL learners' overall English ability (e.g., Ishikawa and Suzuki 2016; Williams 2012), while others have reported that it may improve EFL learners' speaking output (Lu et al. 2015) and reduce EFL learners' anxiety (Lu et al, 2018). But few empirical evidences have been reported that summary writing may have a different impact on different-level EFL learners' oral output. Thus this study aims to measure if AWE system has a different impact on oral performance of EFL learners at different English proficiency level.

Methods

The research aims to address the two following questions:

- Is the AWE system used satisfied the need of different English proficiency level EFL learners?
- Does AWE-based writing have a different impact on different English proficiency level EFL learners? If yes, then, which level of EFL learners benefits the most from using it?

Context and participants

This study was carried out in one week intervals from September 2018 to January 2019, which lasted for 16 weeks. And 341 non-English major students who took the English audio-video speaking course (EVASC) were involved in this study at the authors' university. Their English proficiency levels were measured and classified into three groups based on their scores at College English Test Band 4 (CET-4 a nationwide English test to evaluate non-English majors' comprehensive language proficiency). Students in group one whose scores at CET-4 were below 500 (approximately equivalent to 70 in the centesimal system); students in group two whose scores at the CET-4 were from 500 to 599 (equivalent to 70-84 in the centesimal system); and those in group three whose scores at CET-4 were above 600 (equivalent to 85 in the centesimal system). Since 53 students out of 341 did not take CET-4, thus 288 were counted as valid subjects in this study and the numbers are 90, 166, and 32 respectively in each group.

The classes were conducted in digital language labs, equipped with web-based language learning system, which were helpful for instructors to accomplish curriculum teaching and data collecting simultaneously. At the beginning of each class, the instructor, assigned a topic and then shared basic and related information to the topic. Then, students were required to complete a 200-word summary writing through the *Pigai* system before conducting their oral task, a one-minute personal statement of the same topic.

The questionnaire concerning students' perceptions of summary writing was designed and used in the current study. At the post test, students were required to fill in the questionnaire items right after their final oral task. There were 12 items on the effect of summary writing on different level EFL learners' oral output and they were measured at a five-point Likert scale, which is from 1 "do not agree at all" to 5 "strongly agree". Since English is a foreign language for the participants, the questionnaire items were written in Chinese.

Data collection

Quantitative and qualitative analyses were conducted in this research. Descriptive statistics were used to summarize and describe the quantitative data. And the qualitative analysis was used to generalize students' responses to the open-ended survey questions. Students were required to respond to the follow-up questionnaire anonymously after submission of the final test. All the data were collected for analyzing correlation between students' English proficiency level and their perceptions on the effect of AWE-based summary writing in relation with their oral discourse.

Results and analysis

The one-way ANOVA was employed to evaluate different level students' perceptions towards AWE-based summary writing. And the data were processed by using SPSS 24.0 software. Based on the students' feedback from the survey, it is shown from Table 1 that students' perceptions of the *Pigai* system-based summary writing was very positive. And most of the students agreed that AWE-based online summary writing had provided them with necessary support and assistance so that they could perform their oral tasks properly and successfully, thus it reveals the positive effect of AWE-based summary writing on oral performance.

Table 1 Students' perceptions of the effect of AWE-based summary writing on their oral performance (N=288)

Items in the questionnaire in details	SD/D	N	A	SA	M	SD
1. <i>Pigai</i> -based summary writing is helpful for my personal statement task.	18 (6.3%)	64 (22.8%)	134 (46.5%)	72 (25.0)	3.89	0.875
2. It's necessary to do <i>Pigai</i> -based summary writing before the personal statement task.	23 (8.0%)	65 (22.6%)	132 (45.8%)	68 (23.6%)	3.84	0.909
3. I feel less nervous to perform my personal statement task after <i>Pigai</i> -based summary writing.	19 (6.6%)	72 (31.6%)	128 (44.4%)	69 (24.0%)	3.85	0.886
4. I feel more confident with <i>Pigai</i> -based summary writing.	22 (7.6%)	63 (21.9%)	139 (48.3%)	64 (22.2%)	3.84	0.871
5. <i>Pigai</i> -based summary writing can alleviate my anxiety when I do personal statement task.	25 (8.7%)	73 (25.3%)	123 (42.7%)	67 (23.3%)	3.79	0.929
6. <i>Pigai</i> -based summary writing equips me psychologically when I do personal statement task.	20 (6.9%)	64 (22.2%)	128 (44.4%)	76 (26.4%)	3.89	0.870
7. <i>Pigai</i> -based summary writing helps me enlarge my vocabulary size.	18 (6.3%)	67 (23.3%)	131 (45.5%)	72 (25.0%)	3.89	0.870
8. <i>Pigai</i> -based summary writing helps me at organizing sentences.	16 (5.6%)	62 (21.5%)	135 (46.9%)	75 (36.0%)	3.92	0.874
9. <i>Pigai</i> -based summary writing helps me in speaking fluency.	21 (7.3%)	65 (22.6%)	133 (46.2%)	69 (24.0%)	3.86	0.890
10. <i>Pigai</i> -based summary writing provides me with output information.	27 (9.4%)	67 (23.3%)	126 (43.8%)	68 (23.6%)	3.80	0.937
11. <i>Pigai</i> -based summary writing helps me in content integrity.	21 (7.6%)	65 (22.6%)	130 (45.1%)	71 (24.7%)	3.86	0.901
12. <i>Pigai</i> -based summary writing helps me in logic.	17 (5.9%)	66 (22.9%)	137 (47.6%)	68 (23.6%)	3.86	0.851

Note: SD/D: strongly disagree or disagree; N: neutral; A: agree; SA: strongly agree.

As the result shown in Table 2, the mean scores of students' perceptions were significantly varied among different English proficiency levels ($F(2, 285) = 3.50, p < 0.05$). Bonferroni's post hoc procedure indicated that students in Group 2 had more desirable perceptions of AWE-based summary writing than those in Group 1 and 3. It indicated that students at intermediate English proficiency level gained higher recognition of the effect of AWE-based summary writing on their follow-up oral output.

Table 2 Comparison of English Proficiency Levels on Students' Perception Scores

	Group 1 (n = 90)		Group 2 (n = 166)		Group 3 (n = 32)		F (2, 285)	Post Hoc (Bonferroni)
	M	SD	M	SD	M	SD		
Students' Perception Scores	3.81	0.76	3.94	0.72	3.58	0.89	3.50	Group 2 > Group 1 Group 2 > Group 3

* $p < 0.05$

To sum up students' responses to the open-ended item about the course in the questionnaire survey, it can be concluded that many intermediate level students thought AWE-based summary writing had enriched their expressions in their follow-up oral task and it also enabled them to reduce their anxiety degree. However, those with higher English proficiency level considered the pre-summary writing to be a waste of time, and some of them claimed that they were not accustomed to the computerized test, which may have interfered in their fluency in oral discourse.

Conclusion

This study focuses on the effect of AWE-based summary writing on EFL learners at different proficiency levels. The results verify the positive effectiveness of the AWE-based writing

task on students' oral discourse quality. It can be concluded that AWE-based summary writing does benefit students' in their follow-up speaking output. Besides, the findings further reveal that students at intermediate English proficiency level benefit the most from the AWE-based summary writing. The results indicate that the system used not only can improve their writing skills, but also can alleviate their degree of anxiety and enrich their language expressions in the follow-up speaking output. Therefore, it is suggested that online AWE tools could be adequately used as powerful auxiliary tools in designing various speaking tasks in EFL teaching context. However, some limitations still remain in this research and further studies will be conducted with qualitative data of students' personal statements through textual analyses.

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Critical consciousness in classroom speaking tasks

Bio data



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Abstract

This study concerns critical consciousness in the speaking tasks within an English as a foreign language (EFL) classroom in China. Critical consciousness is a fundamental component of critical pedagogy. Adopting the view of critical pedagogy, the goal of language teaching is to prepare students for social transformation rather than just to teach them language skills and enable them to communicate in the target language. For such purpose, teachers should maintain a strong sense of critical thinking themselves in order to stimulate students' critical consciousness. Critical pedagogy is also concerned with transforming relations of power. The interaction between the teacher and learners in the teaching process and the interplay between human and technology are also crucial in the pedagogical praxis.

Conference paper

Introduction

EFL teachers used to focus on distributing language skills to students in order to enable them to communicate well in English. Language was taught as a system for transmitting messages rather than as an ideational, signifying system that plays a central role in how people understand themselves and the world (Pennycook, 1990). Critical pedagogy challenges the traditional pedagogy with an aim to transform relations of power, that is, to emancipate the oppressed learners from the role of being passive, and to empower them to act upon the external world through an awakening of the critical consciousness. To achieve this goal, EFL teachers need to introduce a critical lens in their teaching process.

Technology plays an important role in critical pedagogy, for it enables EFL teachers to construct a multimedia and even multidimensional learning environment for the learners.

In such an environment, the communication platform between the teacher and students or among students through various interactive speaking tasks can be built, and the goal of developing learners' critical thinking and analytical ability can be achieved as well. The second author teaches English audio-video speaking course (EAVSC) at the authors' university in a digital lab equipped with advanced equipment. Technology undoubtedly facilitates the teaching and learning process. However, the question remains how it supports the teacher in developing students' critical consciousness through the interplay of human and technology in classroom context. To gain critical pedagogical results, EFL teachers should take full advantage of the technological means while putting efforts into the pedagogical practice of content-based task design.

Related studies

Critical pedagogy is an approach to language teaching and learning which is concerned with emancipating oppressed people and empowering learners to think and act critically with an aim of social transformation. It is most associated with the pedagogy proposed by Freire (1970), which advocates for a new relationship between teachers and students. He proposes a problem-posing education in which students can "develop their power to perceive critically the way they exist in the world with which and in which they find themselves" (Freire, 1970, p. 83). Researchers hereafter begin to examine social, cultural, historical, and political aspects in language teaching and learning theory (Stanley, 1992; Giroux, 1997; McLaren, 1988, 1995; Pennycook, 1999, 2001). According to Pennycook (1990), critical pedagogy investigates how knowledge is produced and legitimated within schools and society and then confronts subjugated forms of knowledge critically so as to produce new ones. For Freire (1970), critical pedagogy is concerned with development of critical consciousness. He (1973) distinguishes three levels of consciousness: intransitive, semi-intransitive and critical consciousness. And critical consciousness leads to critical actions to change the role of human beings in and with the world. Okazaki (2005) defines critical consciousness as the ability to realize and question the reproduction of socio-cultural and historical injustice and power relationships.

The theoretical work on critical pedagogy is relatively rich (Burbules & Berk, 1999; Canagarajah, 2005; Sadeghi, 2008). Nevertheless, some researchers conduct empirical studies examining the application of critical pedagogy and the development of critical consciousness. Winkelmann (1995) examines the convergence of electronic literacy, collaboration, and critical pedagogy in the classroom. Morgan (1998) documents how his class raised awareness by selecting for discussion content both socially and individually meaningful to students and encouraging them to reflect on their own life histories so that they find themselves in larger contexts. Okazaki (2005) analyses how students manifested critical consciousness during and after taking the course. Her (2005) shows an example of consciousness raising among TESOL international MA students who draw on critical pedagogy notions of deconstruction and agency. Parkhouse (2017) elaborates on 3 pedagogical approaches in the U.S. History classroom that enhanced students' critical consciousness and agency to act on the world, i.e., naming, questioning, and demystification.

Methodology

Teaching context and participants

EAVSC is developed for the second-grade non-English majors at the authors' university. The course is taught in the digital lab equipped with ROFALL system, a self-developed web-based English language skills training system. The teacher offers knowledge of language as input and then assigns multiple speaking tasks to the class. The tasks often include presentation, role play, group discussion, pair work, and personal statement. For pair work and group discussion, the students, randomly paired or grouped by the system, are required to conduct discourse on the given topics. Giroux and Giroux (2006) maintain that teachers should assume their responsibility as citizen-scholars by taking critical positions, relating teaching to larger social issues, offering students knowledge, debate, and dialogue about social problems. Considering adding social, cultural and historical contexts in each speaking task, the teacher sets the topics of the speaking activities ranging from campus

life to social phenomenon or hot issues. Ideally, these tasks can help the students expand their perspectives on the external world and raise their critical consciousness.

Data collection

All the speaking tasks are under surveillance. The teacher listens to some of the speaking in real-time, paying attention to the students' English output as well as their opinions on the given topics. All the audios of the speaking activities are collected through the lab equipment for further study. The content of the audios is also useful as guidance on the course design.

Discussion

To examine critical consciousness in the speaking tasks is challenging because it is on a ideological level. In her study on writing, Lecourt (1998) points out that what is going on in the writer's mind at the moment of production is invisible to teachers. Here we assume technology and anonymity create a context in which students can fully express themselves and the discourse can represent the students' minds.

As mentioned above, all the discussion topics posed in the speaking tasks relate to learners' lives to some extent. Here we selected the audios of group discussions in one class under the topic "how to tell Chinese stories in English".

Most group started their conversations with acknowledging the precious cultural heritage and long history China processes. In their opinion, the premise of this question is the fact that China's positive role in global affairs intrigues more and more foreigners to learn about the country. The students experience such changes themselves in the real life and are willing to introduce their country to the outside world. This indicates that the students see the world as a reality in process, in transformation that awaits their actions (Freire, 1970).

The later discussion often involved the issue of culture differences. Several students mentioned the importance of leaning western culture as well as Chinese culture. Their concern was that the uniqueness of Chinese stories can be "weird" to westerners. Some students proposed to seek similarities between China and other countries. Some advocated for mixing western counterparts in Chinese stories while remaining the "core" of Chinese culture. One student used the phrase "tell Chinese stories in western way" during the discussion. An exception occurred when one student said that "what they (foreigners) think is not important". This point of view found no echo in other discussions. McLaren (1995) maintains that "a critical understanding of the relationship between the self and other is one of the crucial challenges of current pedagogical practices in the age of postmodernism" (p. 17). The discussion enabled the students to rethink relationships of class, race and power. Generally, discourse is a mean by which its makers transmit power and ideology (Abid & Manan, 2015). Group discussion presents in microcosm how certain discourse gains (and loses) the ability to silence and exclude or provide voice and power to a participant in the given time (Lecourt, 1998). During the interaction with group members, the students had the opportunity to reflect on their words and thoughts by examining the response. This can help the students develop skill in reflection and action that allows them to recognize and work upon the external world both for themselves and for others (Ares, 2006).

Though the majority of the class proceeded well, some of the students expressed their confusion of the topic saying, "I don't understand the question. What does she (the teacher) mean by 'how to tell Chinese stories in English'? Is it about translation?" or "what are 'Chinese stories'?". Although autonomy is valued in the speaking tasks, the students cannot dispense with the direction from the teacher as cues on how to participate. In future teaching practice, the teacher considers adding a short text as follows to guide the students:

"As China comes to play an increasingly important role in global affairs, more and more articles about China and Chinese people are being published. Everyone has the potential to tell stories. What are your thoughts about telling Chinese stories in English? How might we do it?"

Conclusion

In the view of critical pedagogy, students should learn to think critically and develop critical consciousness which helps them take actions to improve their life condition and make social transformation. In order to achieve such goal, teachers need to add social, cultural, historical and political views into the teaching content. Educators should see the flexibility in critical pedagogical praxis and consider critical pedagogy in their own context (Parkhouse, 2018). In the meantime, teachers should consider students' needs when developing curriculum, making sure that no one is marginalized in the classroom. Through such practice, students can gradually be trained to develop their critical consciousness which can elicit their actions to create a more just and equitable society.

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Integration of a bilingual dictionary agent to facilitate lower-intermediate EFL learners' interaction with general-purpose chatbots

Bio data



EDUCATIONAL BACKGROUND:

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EXTRA QUALIFICATION: Programming

Abstract

Chatbots have long been studied for their development, design and features in information technology. For language learning, most of the studies focus on educational benefit brought by chatbots. Few of them draw on information technology know-how to customize a chatbot from language learning perspectives. The present study designed Vbot, a chatbot integrated with a bilingual dictionary agent, aiming to investigate how it could facilitate its interaction with learners who tend to have difficulty comprehending a chatbot's responses due to limited vocabulary size or lack of meaning-inferring skill. Participants were ten lower-intermediate EFL learners. Data collection included conversation histories, interviews, and questionnaires. The result indicated that in comparison with a typical general-purpose chatbot, Vbot was more capable of facilitating and smoothing interaction because of instant scaffolding.

Conference paper

A chatbot, as its name refers, is a computer program that simulates conversations with human beings in textual or auditory forms (Levy, 2009). Brennan (2006) described a chatbot as "an artificial construct that is designed to converse with human beings using natural language as input and output". This artificial construct can be programmed to initiate a domain-specific or a topic-specific conversation (Huang, Zhou et al., 2007), or even a wider range of topics in diverse fields (Kerly, Hall et al., 2007). However, this technology is built not only to emulate human speech but also for applications in information retrieval and education (Ciechanowski, Przegalinska et al., 2019; Jia 2004). For example, some educators built a knowledge chatbot to assist in teaching information security risk analysis in an undergrad class in Sweden, and the feedback from students indicated this virtual assistant aroused interest and was a preferred way to look up information in comparison with Wiki sites (Hoffman, Kowalski et al., 2011). Griol and Callejas (2013) also designed a friendly chatbot as a resource for primary school children at the ages of eight, nine and ten, investigating its pedagogical potential in teaching urban environments. The result demonstrated those children's satisfaction and its positive impact on education.

As a subfield of education, language learning also comprises areas where chatbots are utilized (Fryer, 2006). In particular, Jia and Chen (2008) applied a conversation bot in English class and evaluated its effect on users' behavior. It was found that the application enhanced English fluency, confidence on communications and interest in English. Ayedoun, Hayashi et al. (2015) also implemented a similar system in an EFL context, aiming to increase learners' willingness to communicate. Feedback from users underscored the bot's advantages in reducing anxiety and raising self-confidence and desire to communicate in English in real life conversation contexts. In addition to aforementioned research, many other studies have recognized chatbots as a useful tool to improve learners' motivation and alleviate teacher workload (Winkler and Söllner, 2018), to provide context awareness facilitating cognitive and affective outcomes in learning (Griol and Callejas, 2013; Kerly, Hall et al., 2007).

Educational benefits brought about by chatbots is attributed to its interactivity and communicative mechanism (Hoffmann, Kowalski et al., 2011); learners can continually ask questions and receive useful information, which satisfies their individual needs and helps them adjust their learning in an active manner (Winkler and Söllner, 2018). Liu, Moore et al. (2002) also laid emphasis on its interactive features, such as instant feedback and autonomy facilitation. However, De Gasperis and Florio (2012) stated that a large number of chatbots for language learning are used based on the assumption that learners already have a good knowledge of English as foreign language. In light of it, for those who lack sufficient knowledge of English, they may find it hard to interact with chatbots. The flow of interaction may be interrupted by limited vocabulary or grammar knowledge to comprehend chatbots' responses or produce correct sentences, which are the key factors emphasized by some studies on reading comprehension (Liou, 2000; Zhang, 2001, 2010; Gu, 2003; Lawrence Jun, 2009). Therefore, to ensure usability and a smoother flow of interaction, which play a vital role in technology-assisted learning (Levy, 2009), chatbots need to be tailored for weak learners confined to insufficient knowledge of English. In this regard, the present study aims to design a chatbot for weak learners, examining how it affects user experience and behavior in learning a foreign language.

In terms of chatbot design, Gnewuch, Morana et al. (2017) stressed four design principles of chatbots, which mainly consist of ample communicability, conversational abilities, flexible interaction flows with clarification and confirmation and abilities to handle errors. As the present study intends to help weak learners communicate with chatbots smoothly and sustain the interaction flow, the third principle, flexible interaction flows with clarification would be underlined to address issues of insufficient knowledge of English faced by weak learners.

Scaffolding for weak learners' interaction with chatbots

As for weak English learners, many studies have pinpointed the importance of vocabulary. As strong learners tap into contexts, guessing and contextual clues for lexical meanings, weak learners rely mainly on word-level information from dictionaries when solving vocabulary problems (Zhang, 2010). Many researchers also consider basic vocabulary knowledge a crucial role in reading comprehension, especially for the non-native or less proficient learners (Jun Zhang, 2001; Gu, 2003; Lawrence Jun, 2009). In view of it, the chatbot design of this study features scaffolding on vocabulary, expecting to smoothen their interaction and sustain the flow through vocabulary support.

Framework for vocabulary support

Hunt & Beglar (2005) proposed a framework to support lexical development, mainly composed of three strategies, which are providing decontextualized lexis, using dictionaries and inferring from context. The second strategy is more appropriate as previous studies have deemed word definition in dictionaries fundamental for weak learners in reading (Zhang, 2010; Jun Zhang, 2001; Gu, 2003; Lawrence Jun, 2009), while the first, decontextualized lexis, seems irrelevant to the goal of the chatbot design in this study, which aims to smoothen interaction, that is, fluency, and the third, inferring from context, is also inappropriate judging from weak learners' lack of skill in inferring meanings from context (Zhang, 2010). Therefore, a chatbot refined to optimize learners' use of dictionaries was designed in this study.

Methodology

Participants

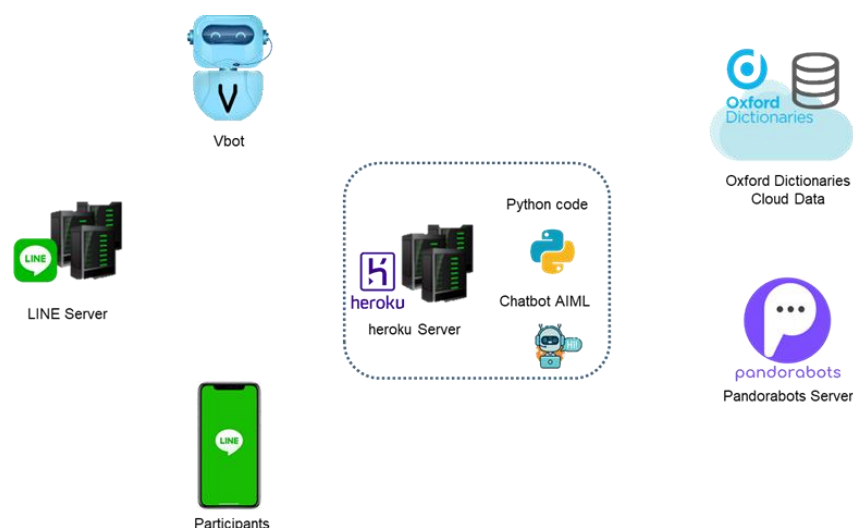
The participants involved ten lower-intermediate EFL learners in Taiwan. Four of them were adults and the others were adolescents. Though they had not taken any large-scale proficiency test such as TOFEL and IELTS, adult learners were distributed to the same lower-intermediate class after a cram school's replacement test three months before the present study was conducted, and adolescent learners were first grade high school students whose levels were evaluated as lower-intermediate by their English teacher.

Chatbot Design – Vbot

The design of Vbot involved AIML (Artificial Intelligent Markup Language). AIML is an XML dialect for creating natural language software agents.

The bilingual dictionary agent integrated into Vbot was designed via the programming language Python, including an English-English, an English-Chinese and a Chinese-English look-up functions. The English-English look-up function extracted entries from Oxford Dictionaries Database licensed by Oxford Dictionaries. The English-Chinese and Chinese-English data came from Dr. eye database.

Overall Infrastructure



- Line (styled as LINE) is a freeware app for instant communications on electronic devices such as smartphones, tablet computers, and personal computers. Line users exchange texts, images, video and audio, and conduct free conversations and video conferences.
- Vbot is a registered LINE account. Participants accessed Vbot by adding the account as a friend.
- Heroku is a cloud platform as a service (PaaS) supporting several programming languages. It lets the developer build, run and scale applications in a similar manner across all the languages.
- The main program is written in Python, responsible for processing inputs from participants, sending requests to the Oxford Dictionaries server for word definition or to the Pandorabots server for responses, and then transferring word definition or the responses to participants through the LINE server.

Data Collection

Conversation history

Participants were asked to export conversation histories to the researcher.

Interviews

Interviews were held twice for each participant. The first interview aims to explore difficulty they faced or feeling they experienced in chatting without the bilingual dictionary agent. The second interview focuses on how the bilingual dictionary agent changed the way they conversed and whether it made the conversation smoother.

Questionnaire

The questionnaire evaluates user experience, behavior, difficulties, use of dictionaries, and suggestion. Participants were asked about difficulties in interacting with Vbot but without the bilingual dictionary agent, and how they looked up unknown words, and then they were asked about difficulties in interacting with Vbot and how they used the bilingual dictionary agent for word definition. Finally, they were asked to compare the conversation with and without the bilingual dictionary agent.

Procedure

Adult Participants

The experiment lasted for two weeks. In the first week, participants were asked to converse with Vbot. Although the bilingual dictionary agent was not available, they could open any mobile application for word definition. They were assigned some topics to converse about, including self-introduction, food, sport, the 20q game, the wordplay game, and personality test game. There was neither time nor length limit, and they needed to chat at least once a day.

In the second week, they were assigned the same topics but with the bilingual dictionary agent available. There was no time and length limit either, and they needed to chat at least once a day.

On the seventh day of the first week, individual phone interviews were held. The second phone interviews were held on the seventh day of the second week, and conversation histories were elicited at the same time.

Adolescent Participants

The researcher was given six school periods to conduct the study due to legitimate issues. Each school period lasted for fifty minutes. Therefore, six participants were asked to form three groups with each group comprising two participants, and each group were assigned two school periods. In the first period, they were asked to converse with Vbot. Although the bilingual dictionary agent was not available, they could open any mobile application for word definition. In the second period, they were asked to chat with Vbot for which the bilingual dictionary agent was available. In the first period, they were assigned some topics to converse about, including self-introduction, food, sport, the 20q game, the wordplay game, and personality test game. There was neither time nor length limit, and they could move on to the next topic if they would not want to continue the current one.

At the end of the first period, a group face-to-face interview was held. The second interview was held at the end of the second period, and conversation histories were elicited at the same time.

Result

First week (school period) – conversation without the bilingual dictionary agent

<i>What difficulties listed below have you faced when you used the chatbot in the first week (school period)?</i>	
Comprehension of the whole sentence	2
Comprehension of unfamiliar words	10
Being unable to reply due to lack of English words	6
Being unable to use an English word correctly in a sentence	4

All the participants had difficulty comprehending unfamiliar words while only two out of ten participants couldn't understand some sentences. It shows that the majority of the

participants could infer meanings of sentences from contexts, but most of them were unable to reply due to lack of vocabulary, and four out of ten were unable to use words correctly.

<i>Did you look up unfamiliar words?</i>	
Yes	10
No	0

<i>If yes, how did you look up the word?</i>	
Open another dictionary app (including any browser)	10
other	0

All the participants looked up unfamiliar words using mobile applications.

<i>How often did you look up unfamiliar words in the first week (school period)?</i>	
As long as there was a word that I didn't know	3
Only when the unfamiliar words make it hard to grasp the meaning of the chatbot response	7
Only when the unfamiliar words look interesting	0

Seven out of ten participants looked up unfamiliar words with mobile applications only when unfamiliar words affected their comprehension of Vbot's response. Only three participants looked up every unfamiliar word.

Second week (school period) – conversation with Vbot

<i>In the second week (school period), did you encounter unfamiliar words?</i>	
Yes	10
No	0

<i>If yes, did you use the look-up function to look up the unfamiliar words?</i>	
Yes	10
No	0

<i>How often did you look up unfamiliar words in the second week (school period)?</i>	
As long as there was a word that I didn't know	7
Only when the unfamiliar words make it hard to grasp the meaning of the chatbot response	3
Only when the unfamiliar words look interesting	0

In the second week (school period), all the participants encountered unfamiliar words and used look-up functions. Seven out of them used look-up functions as long as there was a word they did not know.

<i>In comparison with the first week (school period), how did you feel when you chatted with Vbot in the second week (school period)?</i>

1. I felt it was smoother. Besides accumulating language sense in conversation, I could also learn vocabulary.
2. The response was succinct, but with the bilingual dictionary agent it was easier to respond to Vbot.

3. It could easily translate unfamiliar words and those unfamiliar words would be more impressive to me.
4. It was smoother to respond, and I could consult the dictionary instantly
5. I could better understand the meaning, but responses were sometimes inconsistent.
6. It was smoother. I did not need to switch to another dictionary application.
7. In the second school period I could better comprehend the meaning of a whole sentence because looking up unfamiliar words instantly was very convenient and I did not need to switch to another dictionary application.
8. It was easier to answer questions.
9. I could have a more thorough understanding of Vbot's response.
10. It was easier to converse and more convenient.

<i>Did the look-up function help with interaction with Vbot?</i>	
Strongly agree	4
agree	6
disagree	0
strongly disagree	0

All participants strongly agreed or agreed that look-up functions could help with interaction with Vbot because

1. It was more convenient!! There was no need to open another dictionary application or consult a printed dictionary. Because I did not need to jump back and forth to different interfaces, I was willing to look up more unfamiliar words instead of having an approximate understanding of a sentence.
2. It could be someone to chat with.
3. I did not use another application for translation. I just used the look-up function to know unfamiliar words, and it was easier to converse with Vbot.
4. Deficient vocabulary size.
5. Because there was instant translation, and words were well explained.
6. I could express myself more effectively, and unfamiliar words would not affect my understanding of Vbot's response.
7. With the help of the look-up function, I could comprehend sentences in a more thorough way.
8. If Vbot said a word I did not know, I could look it up and comprehend instantly.
9. Facing an unfamiliar word, I did not need to open another dictionary application, but it was like a normal dictionary in which words were looked up one by one. Besides, there were so many definitions that I needed to ponder over the context to figure out which word definition suits the context.
10. In fact, it was very troublesome to open another dictionary application. With translation (English-Chinese look-up function) it was more convenient and faster.

Finding

Questionnaire

<i>How often did you look up unfamiliar words in the first week (school period)?</i>	
As long as there was a word I didn't know	3
Only when the unfamiliar words make it hard to grasp the meaning of the chatbot's response	7
Only when the unfamiliar words look interesting	0

<i>How often did you look up unfamiliar words in the second week (school period)?</i>	
As long as there was a word I didn't know	7
Only when the unfamiliar words make it hard to grasp the meaning of the chatbot's response	3
Only when the unfamiliar words look interesting	0

In the first week (school period), only thirty percent of the participants looked up every unfamiliar word. However, in the second week (school period), seventy percent of the participants looked up every unfamiliar word. The percentage increased by forty percent. The reason for the increase was that Vbot enabled participants to obtain word definition within the same interface and with no need to open another dictionary application and switch back and forth. Furthermore, the majority of the participants mentioned the benefit and convenience brought by the bilingual dictionary agent, which provided resourceful definitions instantly.

Conversation history

Personality Test

Participants' personality was tested by Vbot. Without the bilingual dictionary agent, participants grasped the approximate meaning of questions and choices, but with the bilingual dictionary agent they were more willing to look up unfamiliar words, so they could grasp the complete meaning of questions and choices, and the answers or results in two different weeks (school periods) were different.

Learning new words to make a sentence

Participants used the Chinese-English look-up function when they needed an L2 word designating a familiar L1 concept. They typed Chinese words to learn new English words and to make English sentences on a regular basis.

Looking up words for comprehension or correspondent reply

It was discovered that participants preferred the English-Chinese look-up function for Chinese explanation. Even if they used the English-English look-up function for English explanation, they still tapped into the English-Chinese look-up function as a follow-up assistance for a clearer explanation. Besides, some participants used the English-English look-up function to construct sentences in reply.

Interview

First Interview

When asked if there were unfamiliar words, participants said even if they saw unfamiliar words, they would open another dictionary app to look it up. As to participants' wording and grammar, they were concerned about limited vocabulary size and incorrect grammar usage. In this regard, they expected a function to check grammar errors before they sent out the message and a built-in translator that could translate Vbot response.

Second Interview

Second interviews focused on the differences brought by the bilingual dictionary agent. Most of the participants said with the bilingual dictionary agent they did not need to open another dictionary application and that within the same interface they could use the Chinese-English, English Chinese and English-English look-up functions, highlighting the convenience.

Discussion

For weak learners, word-level information is an integral part of reading comprehension in face of unfamiliar vocabulary (Jun Zhang, 2001; Gu, 2003; Lawrence Jun, 2009). To obtain word-level information, use of dictionaries is the most suitable strategy based on their language level (Hunt & Beglar, 2005). In the present study, the integration of the bilingual

dictionary agent changed the way they obtained word definition during interaction with a chatbot. Rather than opening another mobile dictionary app, they preferred look-up functions for definitions and example sentences of unfamiliar words, and more participants were willing to look up every word they did not know, which echoed a study conducted by Hoffman, Kowalski et al. (2011), in which participants favored a chatbot for information retrieval more than Wiki sites. Word definition provided by Vbot were more vivid and conversation-like while the ones offered by mobile dictionary apps were rigid and lifeless. Judging from it, affective factors may play an important role in their willingness to look up more words.

As to flexible interaction flows with clarification (Gnewuch, Morana et al., 2017), while opening mobile dictionary apps forced learners to switch to different interfaces and interrupted the immersion into human-simulated conversation, the bilingual dictionary agent effectively sustained the flow by providing instant word-level support for clarification, keeping learners in the same interface and with the same object to interact with, maintaining their immersion into human-like conversation. For future chatbot design, it is suggested that scaffolding for weak learners should be taken into consideration in order to ensure their motivation, interest and the interaction flow are not weakened by difficulties resulting from insufficient knowledge of language.

Conclusion

The integration of a bilingual dictionary agent can engage learners more in a communication scenario with instant word-level support that facilitates and smoothens learners' interaction with a chatbot. For future chatbot design, barriers a weak learner may face should be taken into account to ensure robust interaction flow and learner engagement during interaction with chatbots.

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Developing a web-based adaptive evaluation tool: a case of Spanish copular verbs

Bio data



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Abstract

This study focuses on the development of an adaptive web-based system using the learning of a Spanish grammatical form (SER/ESTAR with adjectives) as an example. The purposes include providing a user-friendly environment in which to assess learning effectively. The proposed computer-assisted evaluation tool allows for a positive experience for learners during testing or self-assessment. The research results indicated that this free web-based adaptive tool was easy for users to access and could be used effectively to assist with learning the target forms. Finally, this study shed light on pedagogical applications of the integration of experimental research and tool development in the learning of a grammatical form that is free, accessible, and effective.

Conference paper

Introduction

The application of CALL (computer-assisted language learning) in foreign language pedagogy and the use of the Internet have recently revolutionized language learning. However, the availability of hardware and software, technical knowledge, and acceptance

of technology are often barriers to the use of CALL in foreign language learning. Specifically, when social justice perspectives are considered, inequities in the distribution of resources and the low academic achievement of students with lower socioeconomic status have made the application of CALL in foreign language learning a problem. *Ubiquitous* access is one of the main characteristics of the Internet. However, *the access to technology could be based on power and privilege. Rice & Katz (2003) referred this as the "digital divide," which is defined as "the gap between those who have and do not have information and communication technologies."* (p.91) Osborn (2006) suggested that the Internet in language education could be utilized to reconstruct social realities. This research project, sponsored by a government grant, was intended to develop a free tool on the Internet at no cost to users, so students can learn a foreign language on their own beyond classroom walls. This study focused on the development of an adaptive web-based system using the learning of a Spanish grammatical structure (SER o ESTAR+Adjective) as an example. Its objectives are to provide a user-friendly environment and to effectively assess student learning of the target forms. *The assessment tool on the website can introduce users to the learning process leading to acquisition of the target structure. At the same time, it can serve as a point of connection for other language classrooms engaging in the same process.*

This computer-assisted evaluation tool allows for a positive testing or self-assessment experience for learners in an online learning context. This self-learning tool is also expected to allow for effective use of class time for foreign language instructors who teach hybrid classes by putting self-learning information and exercises online and conducting face-to-face communicative activities in the classroom. In addition, to benefit students who cannot afford learning software, our research team attempted to build a web-based system open to the general public, using the learning of a Spanish grammatical structure as an example of CALL. This tool is easy to access, with no subscription fee, and without the hassle of software download and installation. It is hoped that this adaptive web-based educational resource with immediate feedback will encourage autonomous learning for interested learners.

Literature review

With the increasing prevalence of computer-assisted language learning, recent studies have put an emphasis on the adaptability of learning assisted tools as well as their content, which can be dynamically tailored to different learning styles, backgrounds, or the language proficiency of learners. Soflano, Connolly, and Hainey (2015) discussed adaptability in a game-based learning context according to different learning styles. Their experimental study showed that a context with adaptability led to better learning results as compared to paper-based learning. Muhammad, Zhou, Beydoun, Xu and Shen (2016) investigated adaptability based on a learning path to optimize a personalized e-learning system by analyzing metadata such as learning content, difficulty level, learner profiles, and users' visit history. Taking Duolingo as a referential example, it is a platform that include language learning website and app and is well-known for its data-driven technology. With the help of big data and artificial intelligence, Duolingo provides a personalized learning experience for each user through adaptive learning systems based on mathematical models. Its unique reward system also keeps users engaged in the learning process. It was evident that Duolingo is effective in improving the average language abilities of beginning learners of Spanish during an eight-week research period (Vesselinov and Grego, 2012).

The grammatical point chosen for this study is Spanish copular verbs (SER and ESTAR, which are equivalent to TO BE in English). This target form was selected because the structure of Spanish SER and ESTAR with adjectives presented a unique situation for our students, who learned Chinese as the first language, English as their first foreign language, and Spanish as a second foreign language. In Mandarin Chinese, the copular verb often occupies an empty position, whereas there are two options (SER or ESTAR) in Spanish and one possibility (TO BE) in English. The examples are presented below.

(1) La mamá es bonita.

媽媽 Ø(很)漂亮.

- The mother is pretty.
(2) El chico está enfermo.
那個男孩 病了。
The boy is sick.

VanPatten (1985, 1987) proposed the developmental stages of the acquisition of Spanish copular verbs, SER and ESTAR based on English-speaking learners. Among the five developmental stages, SER is acquired before ESTAR overall, and the structure of ESTAR with adjectives is acquired late, much later than the structure of SER with adjectives. (See VanPatten, 1985 for details.) A similar pattern of developmental stages of the Spanish SER and ESTAR was found among Chinese-speaking Learners of Spanish (Cheng, Lu & Giannakouros, 2008). Spanish SER and ESTAR are typically taught early, but the structure of "SER or ESTAR + adjectives" is challenging for foreign language learners (e.g., Geeslin, 2004).

Methodology

The assessment tool developed for this study was designed to evaluate learners' reading and listening comprehension of sentences containing the Spanish structure "SER or ESTAR + adjectives." The research data was based on our previous research involving two experiments on the learning of the structure of Spanish SER or ESTAR with adjectives by Chinese-speaking L3 Spanish students: one experiment on L3 Spanish acquisition and another one on eye-movement recordings.

On the one hand, the results of the experiment on L3 Spanish acquisition provided empirical evidence related to differentiating various difficulty levels of test questions measured by the accuracy rates of learners' answers (Lu and Cheng, 2007). On the other hand, the results of the eye-movement experiment showed that the first and total fixation duration time of beginning learners were higher than those of intermediate level students for the copular verb SER, and there was a positive correlation between the first fixation time and the accuracy rate of comprehension.

The programming languages included a front end website user interface (such as html, ejs, css, JavaScript) and a website back end (the web server that processes the data, node.js and express). The programming framework included: (1) a user system for recording user scores and incorrect answers and (2) an evaluation system that provides users with questions at an appropriate difficulty level as determined by the learners' error rate when using "Spanish SER or ESTAR + adjectives" in their previous answers, and (3) the following sequence: "log in, input client data, evaluate, scoring, input client data, and connect to external website."

Two modules were developed to create an adaptive web-based evaluation system. First, the Question-List-Generation module was created based on records of user scores and incorrect answers. The Question-List-Generation module provided a list of questions at appropriate levels of difficulty for the user. The list of questions, which the Question-List-Generation module provided, showed up in order according to the json file storage sequence. The second module, the List-Shuffle module, which shuffled the question list into a random sequence, generated the special Question-Providing feature of this system.

The system development process started with the building of the ejs models (embedded JavaScript, through embedding the function with JavaScript features to create the HTML template) for each type of question, which reduced the amount of HTML files needed for storage and significantly lowering the complexity of the page routing. Then, the question format was transferred from the documents to json (JavaScript Object Notation, a file format) files, which worked with the ejs models. Later, the audio files were produced, and then the front- and back-ends were integrated. After that, the system was tested to locate formatting errors and system bugs, which were then fixed. Finally, we optimized all of the test items and modified the appearance of the website before the product was finalized.

Based on an internal evaluation, the final score was calculated based on the level of difficulty of each question. The level was determined by previous research data, feedback from Spanish professors and research assistants after they tested each question in our database, after which a cross-validation was performed. The weighting factors for easy, medium, and difficult levels were set at x1.0, x1.1, and x1.2, respectively, where users receive 4 points, multiplied by the corresponding coefficient if they answer correctly.

Results and limitations

This tool (<https://spanish-testing-edu8.herokuapp.com/>) not only helps learners gain a better understanding of the usage of the target structure (SER and ESTAR + adjectives), but also provides them with the opportunity to develop reading and listening comprehension skills. Furthermore, one of the main characteristics of this tool is the adaptive algorithm, which presents the subsequent question according to the overall user performance based on his/her previously answered questions. With that being said, if a user chooses the correct answer to a question with a medium difficulty level, there is a greater chance that the next question will be automatically selected at a medium or harder level to match this user's ability. In addition, since the questions appear randomly each time, learners can use the tool for repeated practice. Finally, users can go over the questions without a time limit until they really understand the target forms.

To evaluate user satisfaction of the assessment tool, a survey was conducted as well. With regard to the interface interaction between the users and the developed tool, the survey results showed that most users were satisfied with the Web-Based Adaptive Evaluation Tool. The assisted learning tool was easy and simple to use, and the types of questions included in the evaluation system were found to be useful for learning the target forms set for the purpose of this study. The participants also recommended this developed tool for self-learning.

However, during the process, we encountered several difficulties, such as identifying and classifying a large amount of data, including the correct answer for each test item, user answers and the test bank data. The key was to clearly set the data type beforehand, and then to manage the data based on the user. During the assessment, the user's account number was used as a basis for saving the data. One problem was that the templates of the questions were not compatible, such that the questions could not be saved under the same variable. The solution was to categorize the questions according to their type beforehand so that when the server was opened, the data would then be loaded to different variables. In addition, we simplified the template of each test item and then built each template separately. Another problem was that the questions could not be computed in the front end (to avoid cheating due to the data accessibility). We resolved this problem by moving the computing function to the back end, which, on the other hand, led to an increased flow of data.

Finally, there are some limitations of this developed tool that should be improved in the future. For example, the answer key only appears after users finish the test, which makes it difficult for them to pinpoint the test items they missed. Thus, compared to existing language learning tools, the interface and functions of this system are still very limited at this stage. For example, Duolingo, widely known for its functionality, allows learners to set daily goals and to use their virtual currency to make purchases in the store as a strategy to motivate them. Their discussion platform also enhances the user experience in the language learning process.

Conclusion

This study focused on the development of an adaptive web-based system using the learning of a Spanish grammatical form to provide a user-friendly environment and to allow easy access to a learning platform. The research results indicated that this web-based adaptive tool was easy to access for users at no cost. It could be effectively used to assist learners with learning the target forms (SER/ESTAR with adjectives). In addition, this study shed light on the integration of experimental research and its pedagogical application in

developing an online self-learning tool for the purpose of developing a no cost, easy access and effective learning tool for users.

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Using peergrade to investigate peer feedback in EFL and CSL writing

Bio data



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Abstract

This study aims to examine the focused and unfocused peer feedback in English-as-a-foreign-language (EFL) and Chinese-as-a-second-language (CSL) contexts with the minimal intervention of the teacher-researcher through a web-based system. More specifically, this study conducted in Peergrade sought to understand whether focused (providing feedback on incorrect past simple tense in English and particles, e.g., “le” in Chinese) and unfocused (providing feedback on all errors) groups would provide different types of comments (local and/or global) on their peers’ written assignments. The instruments used in this study included semi-structured and stimulated-recall interviews, feedback contents, and first/revised drafts of English and Chinese compositions. The preliminary results of the pilot study indicated that either focused or unfocused groups in EFL and CSL preferred to provide more local types of comments, e.g., incorrect grammatical features. However, the focused group yielded more global-type comments, such as sentential level comments, than did the unfocused group. Pedagogical implications based on the findings of this study will be included in this report.

Conference paper

Introduction

In the past few decades, peer feedback has been considered an important process that students are engaged in when performing a given task, which benefits students’ critical thinking development, enriches students’ learning experience, and facilitates independent learning (Topping, 1998). In line with the optimal goal of fostering learner autonomy, technology use that engages students in learning has been empirically proved in support of authentic communication, an increase of learners’ motivation, and, more importantly, the enhancement of academic performance (Bellhäuser, Lösch, Winter, & Schmitz, 2016). Peer feedback in L2 or FL learning allows students to work collaboratively in groups in which they help each other to identify grammatical or lexical errors and to exchange their ideas or opinions regarding word usages, uncertainty of grammatical structures, and to develop problem-solving skills.

The purpose of the present research is twofold: First, it aims to help us understand whether learners who focus on particular grammatical features provide more global types of comments than those who concentrate on all grammatical features, including prepositions, conventions, spellings, and tenses. Second, a considerable number of previous research

studies in peer feedback in L2 or FL have examined the nature of peer feedback strategy use by L2 or FL learners without systematically drawing learners' attention to what to focus on when providing feedback to their peers. Hence, the current study based on a previous research (Min, 2005) designed a three-step peer rubric in the peer feedback system Peergrade to assist learners to first identify, then to explain, and finally to correct errors. Following this, relevant literature and previous studies regarding peer feedback in L2 or FL will be discussed subsequently.

Literature Review

To date, previous empirical studies have offered insights into how peer feedback could improve students' writing in L2/FL. The two sections presented here look at the impact of peer feedback or peer feedback training on L2/FL writing in both face-to-face (F2F) and technology-based environments.

Impact of Peer Feedback on the Development in L2/FL Writing

Peer feedback in L2 or FL writing refers to the condition where learners work together to provide each other with comments or feedback on writing (Chen, 2014). Trained peer feedback is considered to be a rich source of linguistic (e.g., grammar) and non-linguistic (e.g., a sense of group cohesion) information (Hansen & Liu, 2005). Evidence drawn from quantitative and qualitative studies suggests that learners benefited from peer feedback, for example, improving their writing accuracy, cultivating their critical thinking, and facilitating self-regulated learning. In Min's (2005) study, EFL participants received peer feedback training, that is, they learned how to provide written comments on their peers' essays according to a four-step procedure: to clarify a writer's intentions, to identify problems, to explain the problems, and to make suggestions for the problems. In that study, the written comments consisted of global and local aspects, where the former related to the ideas of the essays, and the latter to grammar, word usage, and so on. Her findings reveal that the participants were able to make more global types of comments than local ones, and they expressed positive attitudes toward the peer feedback training, improving their confidence, language skills, and ability to self-monitoring.

Rahimi (2013) discovered that the feedback-trained group was more likely to pay attention to global comments regarding contents and organization of writing, whereas the untrained group tended to make local comments, such as grammatical and lexical errors. In addition, the trained group was found to incorporate more global comments than local ones into their revisions; on the other hand, those in the untrained group used more local feedback than global feedback. As suggested, the tendency of providing global feedback that contributed to better quality of writing was attributable to feedback training; in other words, the participants who received feedback training noticed not only the global aspects but also linguistic features that influenced the quality of their peers' writing.

Technology-Based Peer Feedback Training

Peer feedback training in technology- or computer-based environments has received much research attention in recent years because of the advantages it offers: It allows teachers/instructors and students to provide instant access to feedback (Chen, 2014) and enhances writing proficiency (Liou & Peng, 2009). In their study, Liou and Peng (2009) assessed the quality of students' comments before and after peer feedback training and showed that students made more evaluative comments about the strengths or weaknesses of their peers' writing and suggestions as to how a piece of writing could or should be revised. Apart from the increasing number of comments made by the participants, web-based instruction increased the participants' interest in improving their writing.

A group of researchers conducting a meta-analysis, van Popta, Kral, Camp, Martens, and Simons (2017), emphasizes that feedback providers play an important role in enhancing metacognitive skills in L2/FL writing. These skills involve monitoring and evaluating their own learning and, more importantly, developing learners' critical thinking skills. In one situation, when a learner as a reviewer evaluates his/her fellow's writing, s/he compares

to what s/he knows to make effective feedback or comments that in turn effectively helps revise his/her compositions.

Empirical evidence of comparative studies supports a claim that online applications offer more opportunities than F2F environments to increase the quality of peer feedback and writing in L2 or FL. For example, Liu and Sadler (2003) conducted a study that examined the differences between F2F and online groups. The latter group used Word that automatically checks their grammar and ill-formed sentences, whereas the former group did not have the technological aid or lacked confidence in providing corrections/comments to their peers. As a result, the latter yielded more comments than did the former group.

Methods

Participants

A total of 12 participants, involving 5 male and 7 female students, took part in this pilot study with a mean age of 24 years. The participants were sophomore- and junior-year students in the chosen university. Of these students, 6 were in the EFL group and 6 in the CSL group. The former involved EFL students who have studied English for more than 5 years; the latter group was CSL students from Vietnam studying Chinese in Taiwan for at least 3 years. As shown in Table 1, both EFL and CSL groups were further divided into focused peer feedback (FPF) and unfocused peer feedback (UPF) groups. This condition resulted in an equal number of students in FPF (N = 6) and UPF (N = 6) in two languages: in EFL, 3 students in FPF and 3 students in UPF; in CSL, 3 in FPF and 3 in UPF.

Table 1. List of the Groups

	FPF	UPF
EFL	3	3
CSL	3	3

Online Peer Feedback System

The online system Peergrade promotes peer collaborative learning whereby groups of students work together to provide each other with feedback on their own work (Peergrade, 2017), consisting of two modes that allow a tutor to manage “live sessions” and “classes.” In this study, “classes” was adopted, where the researcher created written assignments for students and set up feedback rubrics. Figure 1 illustrates that the system permits a tutor to edit dates for assignment and feedback submissions.

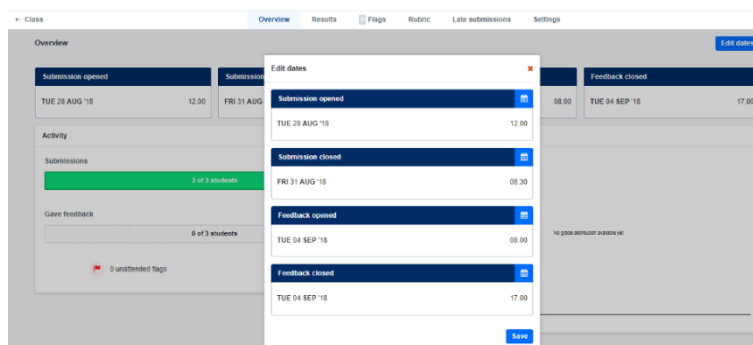


Figure 1. Peergrade: setting up dates for assignment and feedback submissions

In the feedback loop, each student is asked to review his/her fellow’s assignment (see A in Figure 2)— for example, the student views the first assignment shown in B—and provides feedback according to the rubrics. In this study, three questions of the rubric displayed on the right-hand side in C required each student to first identify errors and then to explain the errors in relation to grammar, word usage, and content of compositions and finally to correct the errors.



Figure 2. Peergrade snapshot of the tutor interface

Feedback Rubrics

Based on the feedback categories proposed by Min (2005), three rubric questions with three stages guided the students to provide feedback on their peers' writing. The rubrics were implemented in Peergrade. In the first stage, the participants as reviewers identified global and/or local types of errors. However, to avoid directing the attention of the participants to providing global or local comments as the researcher attempted to provide minimal intervention in the participants' preferences, the focused groups were only informed to identify past simple tense in EFL and CSL, whereas the unfocused groups were invited to identify any types of errors in this stage.

In the second stage, the rubric questions provided to the FPF and UPF groups involved asking the learners to explain the errors identified in the previous stage. During this stage, having to express themselves in the target language might cause difficulties or affect what they tried to say. Thus, they were allowed to use their first language. In the last stage, the students were required to provide corrections or suggestions for the errors.

Instruments and Materials

In this study, instruments and learning materials adopted for both EFL and CSL groups are discussed as follows.

1. Writing tasks

Two online writing tasks, taken from Heaton (1975), were utilized in EFL and CSL groups. Each task was composed of a set of pictures to deal with some situations including people, objects, places, and so on. Each online task asked a participant to compose a draft of 300 words and to revise the draft after receiving feedback from their peers.

2. Semi-structured interviews and stimulated-recall interview

A semi-structured interview with 7 questions was conducted to determine whether the participants noticed their own and others' errors in compositions, whether peer feedback could help them improve their writing in the target language, whether they understood the steps of peer feedback training, and how they felt about using Peergrade to provide feedback to others. The purpose of this interview is to understand how they perceived providing feedback to their peers via the given technological tool. Additionally, to understand how the students reacted or interpreted feedback contents, a paper-based stimulated-recall interview was administered. During the interview, the students were asked if they revised their writing according to the feedback and why they did not revise it. More importantly, the researcher avoided asking leading questions that interrupted the participants' thoughts and minimized talking time and only asked questions to clarify unclear responses of the participants.

Procedure of Data Collection

The researcher first contacted some of potential EFL and CSL students through LINE Instant Messaging. Those who were interested to participate in this study were informed regarding

an introductory session taking place in a computer cluster. The first introductory session was arranged for the focused groups of EFL and CSL, where the researcher briefly explained the research intent and ethics. The participants also had the right to discontinue the research when they did not feel comfortable undertaking any tests. As a result, all the participants gave their written consent sheets.

Each learner signed up for a new account and practiced using the system to upload his/her document, sending messages, and providing comments. Three students worked in one group whereby each student was required to review two compositions. The session lasted about two hours. The focused groups were told to compose a 300-word story that occurred in the past using verbs and to provide comments on errors in relation to the past simple tense in EFL and Chinese particles (e.g., “le”) in CSL. For the unfocused groups in EFL and CSL, they were notified to compose a 300-word story, but they were instructed to use the past tense during the writing process and to provide feedback on what they were told. The next day, the same procedure was repeated for the unfocused group students of EFL and CSL. However, during the feedback process, the learners were instructed to provide feedback on all types of errors.

During weeks 2 and 3, the learners were informed to compose two pieces of writing, provide feedback to their peers, and revise their own work. All these requirements were done in Peergrade. In the final week, four learners were randomly selected from each group to participate in the semi-structured and stimulated-recall interviews. They were interviewed individually by the researcher; during the semi-structured interview, individual students were prompted to answer 7 questions. Immediately after this interview, they were instructed to look at their first and revised compositions that corresponded to their peer comments during the paper-based stimulated-recall interview. One entire interviewing session took a participant approximately one hour. All interviews conducted in Mandarin Chinese were video-recorded, and the recording data were transcribed verbatim for further analyses.

Data Analysis

Qualitative data were gathered and analyzed in this study. The interview data including semi-structured and stimulated-recall interviews were first transcribed and then coded. In addition, peer feedback contents were analyzed according to global and local comments. All data were first coded by the researcher; after one month, she coded the data again. The intra-rater reliability reached 82%.

Results and Discussion

This research explored what types of comments FPF and UPF groups tended to provide to their peers in two languages. Data kept in Peergrade and interview recordings were used. Based on the analysis of the comments in EFL and CSL in two online tasks, Table 2 displays the number (N) and percentages (%) of global and local comments. EFL and CSL students were more likely to make local comments relating to incorrect tenses or prepositions and word usages. For example, in EFL, FPF and UPF made more than 50% of local types of errors.

Table 2. Comments of global and local types made by FPF and UPF

	FPF				UPF			
	Global		Local		Global		Local	
	N	%	N	%	N	%	N	%
EFL	18	40	27	60	4	11	32	89
CSL	11	42	15	58	5	17	24	83

Note: FPF: focused peer feedback; UPF: unfocused peer feedback

Specifically, both the FPF and UPF groups in EFL were found producing more local comments (N = 27, 60% and N = 32, 89% respectively) than global comments (N = 18, 40% and N = 4, 11% respectively). Similarly, the CSL groups yielded more local (N = 15, 58% in FPF, N = 24, 83% in UPF) than global (N = 11, 42% in FPF, N = 5, 17% in UPF)

comments. However, learners of the two languages in FPF made more global comments than those of the two languages in UPF.

In the semi-structured and stimulated-recall interview data, two EFL students in the FPF groups mainly focused on their peers' incorrect tenses, such as using present simple instead of past simple, due to the grammatical feature that all participants were familiar with that did not take too much time or efforts to identify or explain. This condition helped them to notice some other mistakes, such as the incoherent ideas expressed in a composition. On the other hand, three learners in UPF paid attention to the local types of errors that widely covered subject-verb agreement, present/past perfect tenses, prepositions, misspellings, and conventions, because numerous linguistic errors occurred in their peers' compositions.

In CSL, one learner in FPF explicitly stated that his group members did not make any Chinese particle errors (e.g., "le [了]," "guo [過]," "zhe [著]"), so this enabled him to read more carefully the contents and ideas of stories composed by his fellows and to identify whether all the sentences were coherent or logical. He also strongly expressed that making local corrections did not make any sense at all because the ideas of the stories were more important than the linguistic items.

Conclusion

This pilot study explored the differences in the peer feedback of focused and unfocused groups in EFL and CSL via Peergrade. The following limitations need to be considered though. First, the learning behavior in terms of providing peer feedback found in this study cannot be generalized since the sample size is relatively small. Second, as a pilot study, it was expected that the participants would have spent insufficient time practicing peer feedback or writing, and this condition in turn would affect the learner performances. It is likely that the length of the experiment was too short to internalize the learned knowledge (e.g., providing feedback or noticing one's own errors). However, the results provide useful indications for future studies that cover a longer period of time, e.g., a six- or eight-week experiment.

The results of this study point at some pedagogical implications. The first implication is that technological resources provide learners with significant opportunities to enhance autonomous learning as those resources are widely accessible from home or on campus thus allowing the learners to learn the target language without physical or time constraints. Furthermore, peer feedback that benefits students' learning should be effectively implemented inside the classroom where a tutor demonstrates how it works; doing so will potentially contribute to developing self-regulated learning outside the classroom in which learners are able to plan their own learning agenda, monitor their learning progress, and evaluate their learning performances with regard to their writing skills.

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A corpus-driven genre analysis of captions of food-related posts of popular Hong Kong foodies on Instagram

Bio data



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Abstract

As a photo capturing and sharing application launched in October 2010, Instagram has been increasingly popular in recent decades especially among the young generation. Previous studies have investigated this topic in terms of socio-culture, digitalization, gender and also other aspects. However, very few have focused on the genre of the captions of food discourse on Instagram. Thus, the present study aims to fill this niche by adopting a corpus-driven genre-based approach through analyzing popular Hong Kong foodies' food-related posts on Instagram trying to investigate: 1). What are the moves and move types of the captions of food-related posts of these popular Hong Kong foodies on Instagram? 2). If so, what are the communicative purposes served by these move types in terms of Instagram as a social medium? 3). Are there any special features of these captions?

Conference paper

Introduction

The way people communicate and socialize with each other has been dramatically changed by the emerging social media in recent decades. As a relatively new application released by its co-founders Kevin Systrom and Mike Krieger in October 2010, Instagram has witnessed rapid evolution in the past years. Its user community grew from 150 million registered active users (Instagram 2013) to over 700 million in 2017 (Instagram 2017). In less than 10 years, its uploaded photos and videos also grew from the time of its launch over 55 million to 80 million daily in 2016 (Instagram 2016).

As a visual-based mobile application, Instagram is mainly used for capturing people's moments of life through photo or video shooting, editing and sharing. After capturing the photos, users could render the image by using the built-in filters and effects to adjust the color saturation, sharpness etc. before their uploading. Below the uploaded photos is the

caption, which usually offers relevant context for the posted photos. Captions normally encompass Texts, Emojis, Hashtags and Tags. Each of them serves different functions as one component of the caption.

Texts are the descriptions or explanations of the posted photos and the word limit is 1000. Emojis are symbols used by users to express themselves during their Instagram communication. Below the texts within the caption is the Hashtag, which is composed of the symbol (#) followed by a word or certain series of words. Hashtags usually serve two functions: classify the uploaded content into different categories and help the audience to conveniently trace specific topics which they are interested in. The maximum number of the hashtags of each post is 30. Users could also mention other users by the tagging function on Instagram, which would produce a hyperlink directly reaching the profile of the one being tagged. Another kind of tag is called "geo-tag", which is used for users' convenient marking of the location for the post.

Each user's posts are displayed in reverse chronologic order but they are not always viewable to everyone due to different privacy settings on Instagram. The logged-in users can follow others after they receive the "follow requests" permission from the other side so as to become "friends" (i.e. "followers") of those users; however, users followed by them are not necessarily to follow them back. The logged-in users could also "like" or "comment" others' posts and their likes or comments could also be tracked by viewers who could approach these posts. The more feedback (i.e. likes and comments) users give to the posts, the better Instagram would know their preferences so as to recommend posts that cater to their interests, which would help to expand users' social connection within the Instagram community correspondingly.

To sum up, the emerging of the Instagram has revolutionarily changed people's way of viewing and experiencing the visual content on social network. Through the people followed by you and the posts recommended by the platform, Instagram provides new ways for its users to discover and explore the wonder of the world, express themselves through creating and sharing their life experience beyond the restriction of time and space, expand their social networks to interact and connect with each other and broaden their horizons through all the process. Thus, Instagram is of great significance as a social medium in modern society, which lays the scene for the present research.

Literature Review

Previous studies on Instagram

Being an emerging social medium, Instagram has receiving increasing attention from the academia in recent decades. Manikonda, Hu and Kambhampati (2014) conducted the first thorough study on the analysis of users' behavior, demographic information, posted content as well as their social network on Instagram. Though almost focusing on the same issues, Jang, Han, Shih and Lee (2015) noticed the differences of the number and content of the posted photos, way of engagement (e.g. photo tagging for gaining more likes and comments) and using frequency of the self-representation vary from teenager group to the adult group due to the age gap. Compared with these two studies, Ferrara, Interdonato and Tagarelli (2014) moved one step closer to the social dimension and studied how do interesting topics of individuals crystallize to formulate the trend in vogue across our society. Apart from focusing on behavior dimension, scholars also studied the influence of the use of Instagram on people's psychological or emotional well-being. For example, Andalibi, Ozturk and Forte (2015) conducted a research on what kind of role photo sharing played by analyzing what kinds of photos posted by depression people and how would they formulate corresponding captions for these posts so as to offer some guidance for the design of computer systems in such contexts. Reece and Danforth (2017) distinguished depression markers by analyzing attributes of photos posted on Instagram through adopting a computer science based approach. Apart from research related to depression, researchers also found that compared with other media which are text-based, image-based applications (like Instagram) tend to relieve people's loneliness since the application enhances intimacy between users on the platform (Pittman & Reich, 2016). Furthermore,

since Instagram is a very powerful social media platform to reach the audience, it is widely used in various audience-targeted industries like brand building in marketing (Miles, 2014), fashion (Carah & Shaul, 2016; Abidin, 2016 etc.), tourism (Fatanti & Suyadnya, 2015); teaching and learning facilitation in the digitalized era (Al-Bahrani & Patel, 2015 etc.); dermatology (Karimkhani, Connett, Boyers, Quest & Dellavalle, 2014), journalism (Alper, 2014) and so on.

Previous studies of food on Instagram

Manikonda, Hu and Kambhampati (2014) classified Instagram photos into eight categories (friends, food, gadget, captioned photo, pet, activities, selfies and fashion) in terms of content. Among all, food category accounts for over ten percent, which is not small in number. However, studies of food on Instagram are relatively few. In terms of the analysis of content of food posts on Instagram, Rich, Haddadi and Hospedales (2016) conducted the first large scale content analysis of food posts to investigate the relationship between posted food images and their related Hashtags through a data-driven approach and formulated the approach for food image recognition at high accuracy level. As for the impact of food posts on Instagram towards people and their behaviour, Spence and his colleagues (Spence, Okajima, Cheok, Petit & Michel, 2016) investigated whether the increase of the exposure of food images could exert any physiological or psychological influence on people's brain (like changing their neural activity etc.) or people's behaviour response (like triggering hunger or intensifying their desire for food etc.). Researchers have also explored how do food posts on Instagram serve specific purposes in the social contexts like how do food posts on Instagram could be used as a tool for promoting healthy lifestyle (Mejova, Abbar & Haddadi, 2016) or as a tool for motivating healthy eating on campus among university students (Conklin, Giuliano & Baker, 2018). However, very few have focused on the genre of the captions of food discourse on Instagram.

Thus, the present study aims to fill this niche by adopting a corpus-driven genre-based approach through analyzing popular Hong Kong foodies' posts on Instagram and answer the following questions: 1). What are the moves and move types of the captions of food-related posts of these popular Hong Kong foodies on Instagram? 2). If so, what are the communicative purposes served by these move types in terms of Instagram as a social medium? 3). Are there any special features of these captions?

Methodology

Theoretical foundation

Swales (1990) defines genre as a communicative event which serves certain communicative purposes and is identified and understood by its community members. Focusing on meaning and ideas of the text, he also developed "move analysis" into a top-down approach which regarded each discourse text as being composed of several "moves" in a certain kind of order and each move serves a certain communicative purpose (Swales, 1981, 1990).

Since we found that the captions posted by these popular HK foodies formulate a certain type of genre and the top-down approach is a very effective way to analyze specific kind of genre, we decided to conduct a top-down genre analysis of these captions to explore their moves and move types as well as the functions potentially served by them since certain genre is associated with certain group of people and certain communicative purposes (Jones, 2012).

We drew on the adapted version (see Table 1. below) of the top-down approach of the move analyzing strategies of Biber et al. (2007) and Upton & Cohen (2009) to analyze moves, move types of these captions and Hashtags in terms of the communicative or functional purposes served by them.

Table 1. Top-down corpus-based analysis of discourse organization

Steps	Application
1. Communicative/ functional categories	(1) Identify all possible move types of the genre in terms of communicative/functional purposes by roughly reading the texts of the captions for several times (2) Group move types that are functionally close to each other into the same category (3) Keep refining the classification of the move types by conducting a pilot-coding until the boundaries are clear and there is no overlap between each move type (4) Write the first draft of the definition of each move type
2. Segmentation	(5) Segment the texts into moves as defined in (4) and record the new moves (6) Refine the move type categorization by creating new move types based on (5) and merge with the old scheme developed and defined in (4) (7) Rewrite definition, explanation and give examples for each move type within the new categorizing scheme
3. Classification	(8) Classify each identified moves into the new scheme of move types

Adapted from Biber et al. (2007) and Upton & Cohen (2009).

Data Collection and Analysis

The three selected participants of this research are foodies on Instagram who satisfy the following criteria. They are: 1). Ranked top ten among the HK foodies in terms of popularity (i.e. the number of the followers on their Instagram profile) based on our literature review; 2). Their posts are mainly HK based (judged from the geo-tags of each post); 3). They should be willing to participant in this study and allow us to retrieve their food-related Instagram posts for the use of this academic research.

The corpus consists of snapshots of food-related posts from their Instagram pages throughout the whole February of 2019. All the texts of the captions were converted into word text files matched with corresponding food pictures (see in the Appendix 2) but all other information like emojis, check-ins and comments were excluded.

One multilingual researcher coded and tagged the corpus data in Microsoft Word files manually with the guidance of Saldana (2009) and procedures in Table 1 for the first round, which was later double-checked by the other multilingual researcher for the sake of accuracy. Follow-up discussion and re-confirmation were also deployed for the refinement of the coding scheme and coding results between these two researchers. The final statistical analysis was conducted and accomplished by the use of Microsoft Excel.

Results and Discussion

Move types and their communicative functions

According to the statistical analysis, twelve move types were identified from the total 123 moves as showed by the following Table 2 including their using frequency as well as percentage:

Table 2. Twelve identified move types, their frequency and percentage

Move types	Frequency	Percentage
1. Sharing their own experience, emotions or thoughts	16	13.01
2. Introducing the food name or style	7	5.69
3. Describing the appearance or taste of the food	3	2.44
4. Evaluating the restaurant or the taste of the food	5	4.07
5. Making congratulations or wishes to others	11	8.94
6. Making greetings to others	5	4.07
7. Thanking others	2	1.63
8. Hashtags	42	34.15
9. Tagging (e.g. people or restaurants)	17	13.82
10. Cheers/proclaims	3	2.44
11. Appealing (e.g. friends, customers etc.)	8	6.50
12. Adding relevant background story (e.g. historical background etc.)	4	3.25
Total	123	100

As we can see from the above, Move 8 Hashtags (34.15%) is used most frequently among all twelve move types, followed by Move 9 Tagging (13.82%) and Move 1 Sharing their own experience, emotions or thoughts (13.01%). Such results might indicate that these popular HK foodies on Instagram are quite used to make full use of the Instagram built-in functions (namely, Hashtags and Tagging) to formulate their captions to reach their target audience and share their own experience, emotions or thoughts.

Different categories of Hashtags

536 hashtags were identified from the captions of all the collected posts, which fell into three main theme categories in terms of their communicative or functional purposes: A). Food description; B). Experience of getting food; C). Issues shared by certain Instagram communities (as shown in Appendix 1). The frequency of each category was recorded and the percentage of each sub-category was also calculated as follows:

Table 3. Frequency and percentage of three categories of Hashtags

Category	Hashtags	Category A Food description (7 categories)	Category B Experience of getting food (5 categories)	Category C Issues shared by certain Instagram communities
Frequency	526	201	158	167
Percentage	100	38.21	30.04	31.75

The definition, explanation, examples, frequency and percentage of each category are listed as below:

Table 4. Category A Food description (7 categories)

Categories	Definition & Explanation & Examples	Frequency	Percentage
Food description	Descriptions centering on food include the following 7 subcategories	201	100
A1. Cuisine/Dishes	Food cooked in a particular way as a meal, e.g. friedeggs, charsiu etc.	20	9.95
A2. Ingredients	The ingredients that were used to cook cuisine/dishes, e.g. soy, glutinousrice etc.	80	39.8
A3. Desserts	Sweet food served after the main part of a meal, e.g. pastry, cookies etc.	9	4.48
A4. Drinks	What they drank when they enjoyed the food, e.g. bubbletea, coffee etc.	3	1.49
A5. Styles	The style of the food, e.g. hkfood, chinese food etc.	59	29.35
A6. Features/Properties	The features or properties of the food like the shape (e.g. rose), the taste (e.g. sweet), the size (e.g. mini) etc.	20	9.95
A7. Evaluation	Judgment or evaluation about the food from foodies, e.g. yumyum, lovefirstbite etc.	10	4.98

Table 5. Category B Experience of getting food (5 categories)

Categories	Definition & Explanation & Examples	Frequency	Percentage
B. Experience of getting food	The event or activity that the poster jointed for getting good, which consists of the following 5 elements	158	100
B1. With whom	Suggest their relationship with those who they are together with when enjoying the experience of getting food, e.g. brosforldife, friends etc.	1	0.633
B2. Time	The time when they enjoyed food including season (e.g. summer), month (e.g. July), day (Friday) etc.	1	0.633
B3. Emotion/mood	What kind of emotion the user was in, e.g. happytired, missinguk etc.	20	12.66
B4. Where(country/district/restaurant)	The place or venue that they enjoyed food including the name of the country (e.g. Singapore), district (e.g. hk) or restaurant (e.g. no5italian) etc.	49	31.01
B5. What/Why	The event/activity of getting food or other things that deserve marking, e.g. picnic, dinnerdate etc.	87	55.06

Table 6. Category C Issues shared by certain Instagram communities

Category C	Definition & Explanation & Examples	Frequency
Issues shared by certain Instagram communities	The hashtags related to issues shared by certain communities on Instagram e.g. hkfoodie, food52 in food community and hkig in Instagram community etc.	167

As we can see from the above Table 3 to Table 6, Category A Food description depicts food in terms of 7 aspects, among which the subcategory A2. Ingredients ranked the highest percentage (39.8%) followed by the subcategory A5 Styles (29.35%), which seems indicate that people care more about these two aspects of food shared on Instagram.

As for Category B Experience of getting food, the percentage of the subcategory B5 What/why ranks the highest (55.06%) followed by subcategory B4 Where (country/district/restaurant) (31.01%) and B3 Emotion/Mood (12.66%), which indicates that these popular HK foodies tend to be more likely to offer information about the event and location as well as express their emotion when they describe experience of getting food in the Hashtags of their captions.

As for Category C Issues shared by certain Instagram communities, Hashtags within this category contain issues shared by people from particular communities on Instagram such as #food52 in the Instagram foodie community, #hkig in the Instagram community etc. By various roles played within different kinds of communities, these popular HK foodies succeed in reaching varied target audience and relevant communities so as to build and reinforce connections with these people.

To sum up, Hashtags used by popular HK foodies mainly play three roles in terms of their social functions: food description, record of the experience of getting food and symbols to certain target audience communities for connection building and reinforcement.

Tagging as a special feature

Apart from the above discussed text and Hashtags within these captions, we also distinguished tagging as a special feature in the formulation of the captions of these popular HK foodies' posts on Instagram to serve various communicative purposes in different social contexts such as tagging people (e.g. their friends or photographers or chefs etc.) to express their thanks or giving feedback or sharing experience, tagging restaurants or stores or brands for recommendation, tagging certain community to reach the target audience to attract more attention etc.

To sum up, we collected and analyzed captions of food-related posts from three top popular HK foodies on Instagram through a top-down approach based on the corpus-driven genre analysis. We distinguished twelve move types from 123 moves of the texts of the captions and three main categories from 536 Hashtags. We also statistically analyzed the frequency of each move type and Hashtag category as well as their percentage within each larger category. Furthermore, tagging is also distinguished as one special feature for contributing to the formulation of the captions of the posts. Through the process of analyzing various communicative purposes served by these posted captions, we can see that these popular HK foodies are quite good at making full use of Instagram as a social medium for information exchange, eating experience expressing and sharing, interpersonal relations building and reinforcement with targeted community within different social contexts.

Limitations and future research

Due to the narrow focus of this research, the analysis of food images was not included, which might influence the comprehensiveness of the present research. Future study could continue in this direction, namely, to explore how would these captions support people's understanding of the images.

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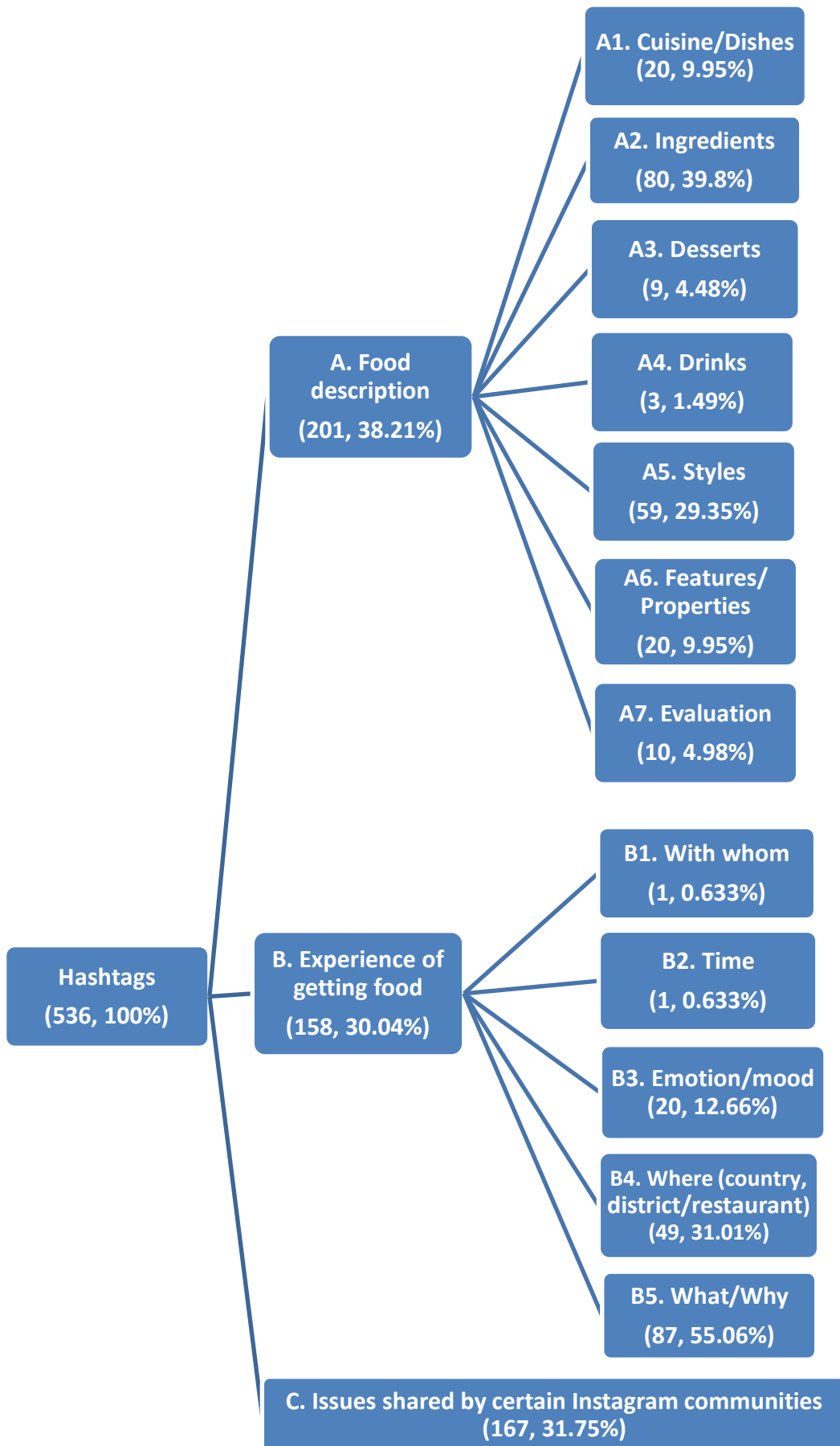
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Appendix 1



Appendix 2



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[Sweet Fashion House](#)

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[FEBRUARY 8](#)

[foodandtravelhk](#) #FoodandtravelHK beautiful colourful cakes
at [#SweetFashionHouse](#) 's latest branch in [#RitzCarltonHongKong](#) . 3 things i like
about them:

- 1) unusual flavour (yuzu + orange papaya/ black tea with blackberry!) .
- 2) textures' always on point
- 3) chic outlook

This is my go-to cake shop if I need a cake to impress for any special occasion

[#TsimShaTsuiEats](#)

7w

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[#hongkongcake](#)[#hongkongcakeshop](#)[#hongkongpatisserie](#) [#cakeshk](#)[#hkcakes](#) [#kowlonstation](#)[#hongkongeats](#)[#RitzCarltonHotel](#) [#FrenchPastry](#)[#ArtOfCake](#) [#sweetsweat](#)[#crazyforcakes](#)[#sweettoothforever](#)[#sweettoothsatisfied](#)

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Improving reading rate through vocabulary learning using an online learning platform

Bio data



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Abstract

This study explored the influence of the use of the learning-platform Quizlet on students' vocabulary knowledge and their consequent improvements in reading rates. These improvements were compared to vocabulary knowledge and reading rates achieved by students who used their own approaches to vocabulary learning, mainly rote learning. Results show that students in both groups increased reading rates over repetitions and over the duration of the study period. However, using the learning platform Quizlet was more effective for vocabulary learning. Consequently, increases in reading rates were higher in the experimental group than in the control group. One explanation may be that Quizlet helped students to better judge how well they had learned the vocabulary.

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Conference paper

Introduction

This research focuses on English for Science and Technology in Taiwan. Students in these fields are required to read large quantities of academic texts. However, low reading rates due to very limited vocabulary knowledge impede their reading. To overcome this problem, this study investigated whether the use of a learning platform can better assist students in developing their vocabulary knowledge than the rote learning techniques students traditionally use, and whether the use of this platform influences students' reading rates. The methodology used in this study also provided a technique for students to evaluate their own progress, thereby enabling them to enrich their own learning ecologies.

Literature review

An important factor in reading rates and comprehension in a foreign language is vocabulary knowledge. Laufer (1989) estimated that 95% of vocabulary is necessary to understand texts, while Hu and Nation (2000) proposed that 98% would be needed. Schmitt, Jiang, and Grabe (2011) also found a vocabulary coverage of 98% to be a more reasonable target for language learners.

Previously, university students in Taiwan had been required to learn 7000 English words in high school. Although this number was reduced to 4500 in 2018 to give more time for listening and speaking practice (Everington, 2018), this change did not affect students taking part in this study. Yet, Chen (1998) showed that Taiwanese high school graduates normally have a vocabulary size of just 2000 to 3000 words while Chen and Jonas (2009, p.100) stated that English teaching at universities is often '*remedial education in the basics of what they are supposed to have already learned*'. One of the reasons for students' low performance on vocabulary tests may be the use of rote learning techniques such as rereading and rewriting new vocabulary items, which is popular among students at Feng Chia University (Luo, 2019). Rote learning may also lead to an illusion of competence as students make judgements about their learning during study based on information at hand which will not be available during testing (Koriat & Bjork, 2005).

The use of computer-assisted language learning for learning high frequency words has been shown to improve vocabulary knowledge, reading comprehension, and speed of word recognition (Tozcu & Coady, 2004). Mobile technology can foster learner autonomy as it allows for ubiquitous learning in informal settings (Chen, 2013) and a large effect size has been found in a meta-analysis on mobile assisted vocabulary learning (Lin & Lin, 2019). Using a spaced repetition software (SRS) has been successful in increasing vocabulary knowledge but the software only allowed for receptive learning modes, such as matching answers (Bower & Rutson-Griffiths, 2016) or flashcards (Seibert Hanson & Brown, 2019).

This study investigated whether the use of a mobile app that also allows for productive study modes such as translations would improve learners' vocabulary retention more effectively than the rote learning techniques students in Taiwan often use. Furthermore, it investigates whether such improvements in vocabulary knowledge lead to a higher increase in reading rates in the experimental group compared to the control group.

Methodology

The course is a one-semester English for Science and Technology course, offered two-hours a week. While open to students from all departments and all years, the majority of students taking the course are undergraduates in their final year of study coming from different departments. Of the 60 students in each of the two classes, about 60% of the students volunteered to take part in the study. However, to better control for other factors that might influence the outcome of the study, only those students who were not taking any other English classes that semester and having comparable reading rates were included in the study, 28 students in the experimental class and 25 students in the control class.

Over the semester, all students read a new reading passage each week. The length of the passages they read depended on students' reading rate, as initial time for reading was set to 20 minutes. This will normally result in 20 to 30 unknown words per reading independent of the length of the reading passage read at that time. Students used their smartphones to control for reading time and for looking up unknown words in their preferred online dictionaries. They annotated unknown vocabulary items and their translations on an online log sheet while reading.

For each reading passage, students in the experimental group created learning sets on the learning platform Quizlet (<https://quizlet.com>) that contained the unknown words of the respective passage. Then, they studied these words on Quizlet over a two-day period using different study modes such as flashcards, translations, dictations, matching word and definition, or a test mode which combines translations, multiple choice, matching items and true/false questions. They were asked to try out the different modes and identify which modes worked best for them and to study a set at least 5 times on a day that required studying that respective set.

Figure 1 shows a part of the online reading log. The cells in line 46 automatically calculate reading rate in wpm and unknown words per line (wpl) from the data the student recorded

on the log sheet (lines read, time needed, and unknown words). Students also uploaded a snippet from Quizlet to the school’s LMS iLearn 2.0 showing modes of studying on that day (Figure 2).

40	32	lion's share	最大部分		
41	33	randomly	隨機地		
42	34	caulking	填隙		
43	35				
44	36				
45	37				
46	wpm: 32.04	wpl: 1.0625	wpm: 74.36	wpl: 0.125	wpm: #DIV/0! wpl: 0
47	Mode of study day 1		Mode of study day 1		Mode of study day 1
48	cards 1		cards 1		
49	match 6		learn3		
50	learn 2				
51					
52	Mode of study day 2		Mode of study day 2		Mode of study day 2
53	learn 5		learn3		
54					
55					
56					

Figure 1: Example of part of the online reading log (experimental group)

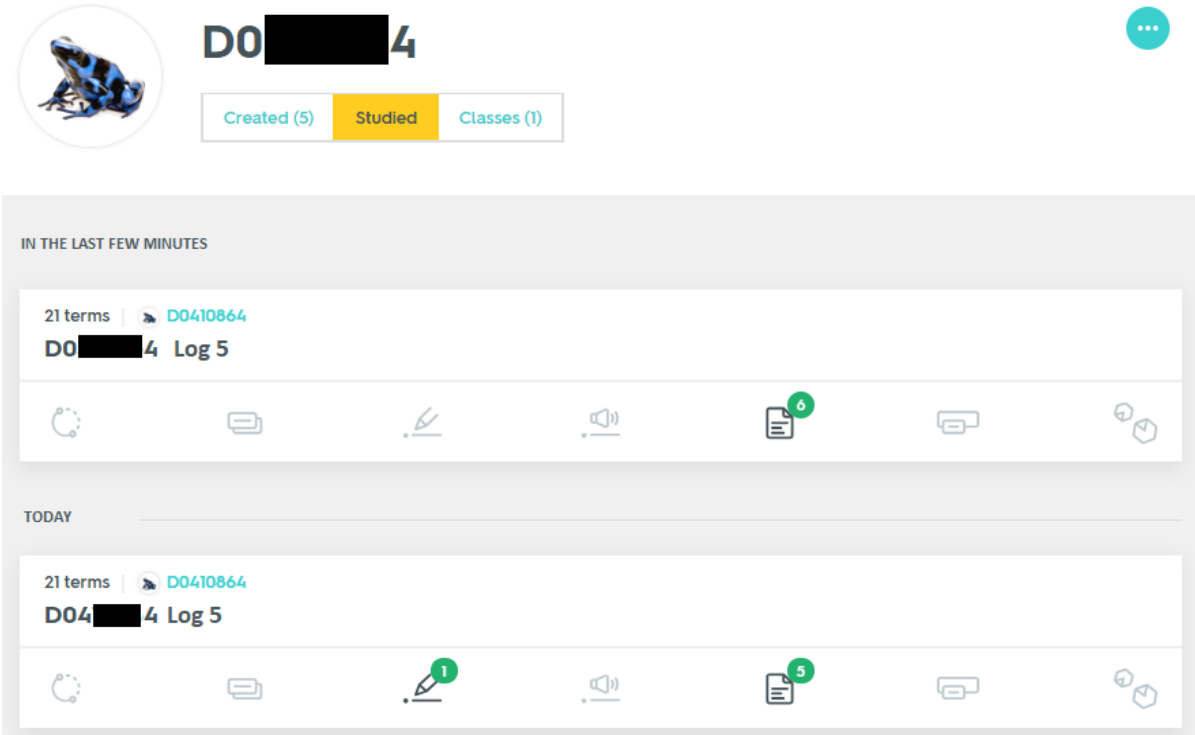


Figure 2: Examples of a student’s proof of study modes in Quizlet posted to iLearn 2.0

Instead of using Quizlet, students in the control group studied their vocabulary in their own way, but kept records about their modes of learning on their log sheets. They uploaded a recording of themselves reading the words, or a photo of the paper showing the words they had written down, the mind maps they had created, or whatever other way they had studied the vocabulary. They also studied their vocabulary on two days. However, writing down the words several times was the most commonly used option. Figure 3 shows an example of a recording uploaded to the school’s LMS iLearn 2.0.

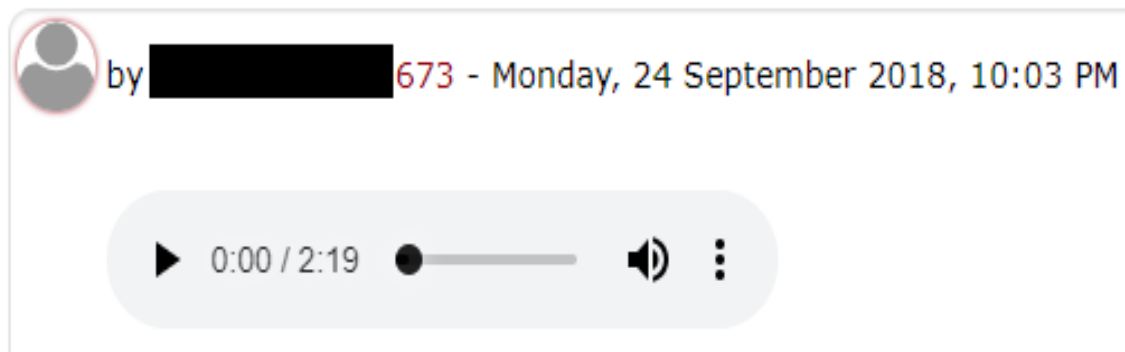


Figure 3: Example of a recording posted on iLearn 2.0 (control group)

One week later, all students reread the same reading passage they had read the week before, annotating time needed and unknown words on their log sheets. Again, students studied their vocabulary on two days, students in the experimental group using their learning sets on Quizlet and students of the control group revising their vocabulary according to their preferred way of studying. Three weeks later, they finished the third reading of the respective texts, again annotating time needed and unknown words and practiced their respective vocabulary again on two days. Over the semester, students read 14 reading passages. They completed all three readings of the first 10 reading passages, while the remaining passages were read only twice before the end of the semester. The first reading passage was again read at the end of the semester, in week 15, to evaluate vocabulary learning and reading rate changes over an even longer period.

To avoid the problem Luo (2018) identified of having too long a time at the beginning of the study to obtain reliable data from students concerning their use of Quizlet, from the first week on, students received feedback through the app Remind (<https://remind.com>) after uploading their data. If they had not uploaded their data by 5 pm on the day of class and/or the following day, they were notified of the missing homework to give them enough time to finish on time. Consequently, reliable data were obtained from the outset of the study.

Shapiro-Wilks test and Levene's test were used to test for normality and for homogeneity of the variances, respectively. To test for significant differences, t-tests were run.

Results and Discussion

Increases in reading rates over the semester

Students in both groups increased their reading rates over the semester (Figures 4 – 6). Reading rates in words per minute (wpm) were low for the initial readings of each week (Figure 4) because reading time also included the time needed to check vocabulary while reading. They are thus unrepresentative of reading rates for texts at a difficulty level appropriate for each student. Thus, the second reading (Figure 5), when students had studied the vocabulary and were familiar with most words, gives a much more precise representation of increases in reading rates over the semester. Nonetheless, even initial reading rates increased significantly, from 16.4 wpm in the first text (T1) to 26.9 wpm in the last text (T10, $p < 0.000$) in the experimental group while there was no significant increase in the control group ($p = 0.088$). Beginning with T9, differences between the two groups were significant ($p = 0.025$).

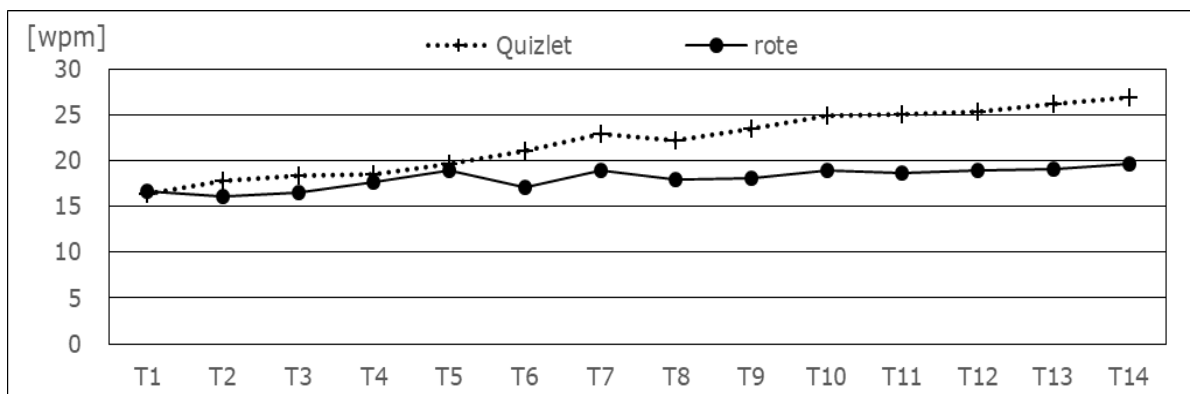


Figure 4: Reading rates in wpm for the first reading of each text

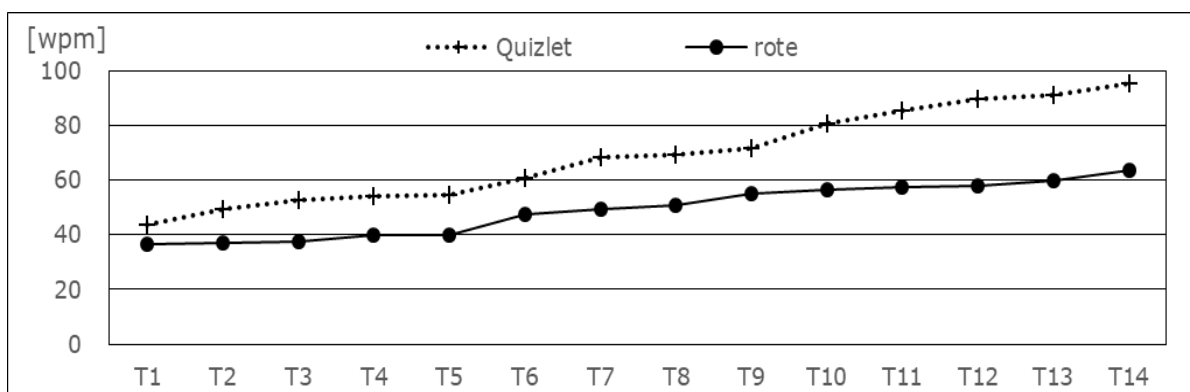


Figure 5: Reading rates in wpm for the second reading of each text

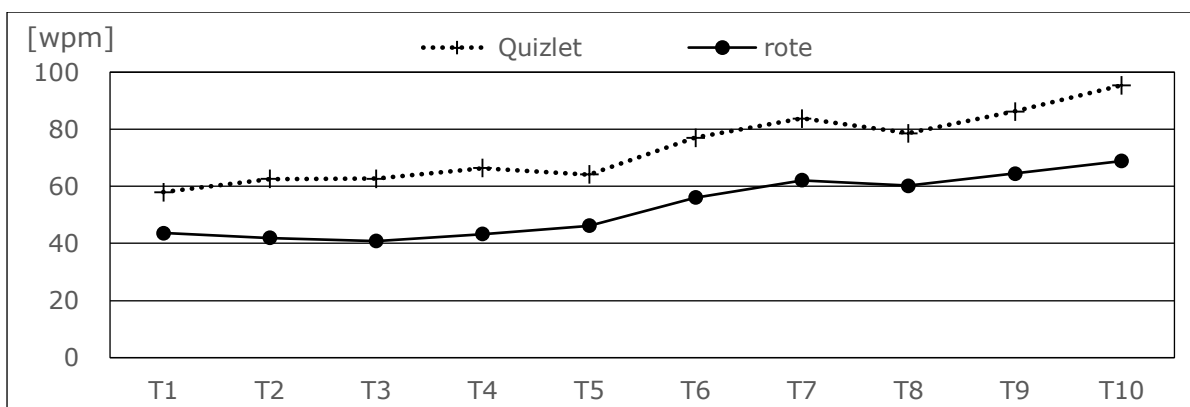


Figure 6: Reading rates in wpm for the third reading of each text

The increases in reading rates ($p < 0.000$ for both groups) between the first and the second reading of the same text were due to less time needed to look up words. First, because students still remembered most of the new words after one week (Table 1). Another reason is that forgotten vocabulary items can be found on the log sheets, which is much faster than looking up words in a dictionary. However, students also increased their reading rates over the entire semester. Students in the experimental group doubled their reading rates from 43.7 wpm (T1) to 95.5 wpm (T14) and from 58.0 wpm (T1) to 95.4 wpm (T10) in the second (Figure 2) and the third readings (Figure 3), respectively. Students in the control group also increased their reading rates significantly ($p < 0.000$) in the second and third readings, but to a much lower extent (Figures 5 and 6). Beginning with T8, reading rates in the second reading were significantly lower than reading rates in the experimental group ($p = 0.025$). Differences between reading rates in the third reading were significant ($p < 0.05$) for most of the texts, except for T1, T7, and T8. Differences between the second and third reading of each text were also less than differences between these readings in the experimental group.

The difference in vocabulary learning techniques used seems to be the factor responsible for differences in increases in reading rates between the two groups. Both initial reading rates in T1 and English instruction outside this class had been controlled for when selecting participants. Furthermore, during the semester, students only studied between 200 and 300 new words. Thus, the number of new words learned alone does not explain why students increased their reading speed over the semester to such an extent. Data analyzed thus far reveal that students' word lists in both groups contained more than 50% of the most frequent 3000 words at the beginning of the semester – high frequency words students were supposed to have learned at high school. These words are an important part of each text. Over the semester, the number of high frequency words on students' vocabulary lists in the experimental group appeared to drop. This might be an important factor in increasing reading speed. However, analysis of these data and the data from the control group has not been finalized and further investigation is needed to verify this hypothesis.

Vocabulary retention

Figure 7 shows the number of unknown words per line when a text was read for the first time. In the experimental group, the amount of new words in a text decreased from 1.52 words per line in the first text to 0.59 in the last text. While the evaluation of these data has not been finalized, the drop in the first five weeks in both groups may be due to students relearning vocabulary they had learned in high school but had forgotten. Thus, when reappearing in later texts these high frequency words would not reappear in students' reading logs while the percentage of low frequency words would increase. However, further evaluation of the data is needed to verify this theory.

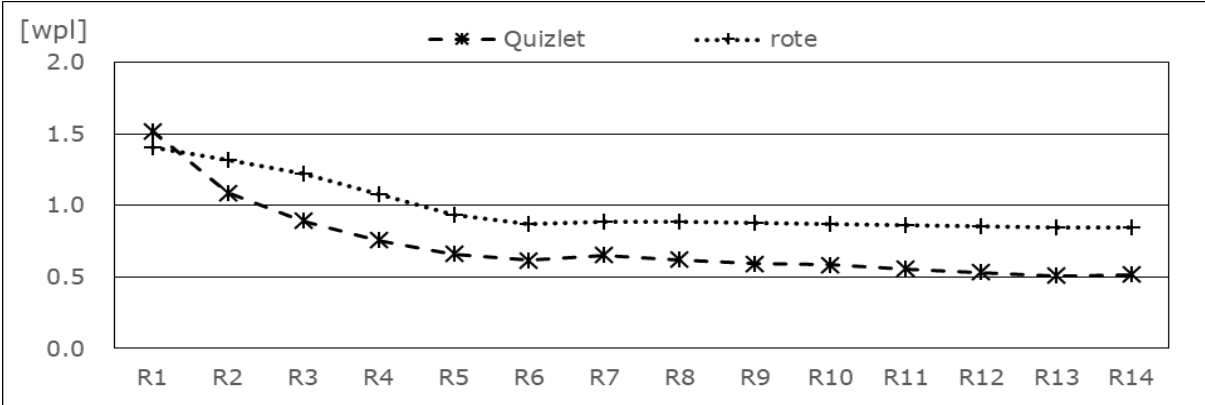


Figure 7: Number of unknown words per line in the first reading of each text

However, the number of unknown words did not drop to the same extent in the control group. In addition, the percentage of words forgotten again after one week and one month differed significantly (Table 1). One explanation for better word retention in the experimental group could be that the use of the app Quizlet allowed students to better control the extent to which they had learned the new words. Rereading and rewriting the new items several times may have led to a familiarity with the learned content that in turn may have induced an illusion of competence (Koriat & Bjork, 2005). The use of Quizlet, however, allows for self-testing. In the learning modes *learn*, *spell*, and *write*, a set is only marked as finished, if all items have been correct twice. As a result, students in the experimental group could better predict the extent to which they had learned the vocabulary well. Thus, this study supports findings from Seibert Hanson and Brown (2019) that vocabulary apps are beneficial for learning. However, satisfaction with the app as expressed orally in class in this study was much higher, probably because students were able to see their progress in the learning logs.

Table 1: Average percentage of words forgotten again after one week and one month

	Experimental		Control		Significance
	mean	SD	mean	SD	p
% words forgotten again (week)	22.65	11.49	33.07	16.80	0.000
% words forgotten again (month)	11.50	9.04	19.64	12.49	0.006
Significance (p)	0.000		0.000		

Table 2: Changes in the number of unknown words per line (wpl), first reading passage

Group		Week 1	Week 2	Week 5	Week 15	p(w5*w15)
Experimental	wpl	1.498	0.138	0.098	0.109	0.168
	SD	0.291	0.131	0.089	0.092	
Control	wpl	1.507	0.484	0.239	0.379	0.002
	SD	0.520	0.437	0.160	0.239	
Significance (p)		0.217	0.000	0.000	0.000	

When comparing the number of forgotten words in T1 over the whole semester (Table 2), results show that the decrease in the number of unknown words was higher in the experimental group than in the control group. In addition, students in the experimental group were also able to maintain their low level of unknown words, while their peers in the control group began to forget words they had learned before, generating significant differences between week 5 and week 15 in the control group.

Conclusion

The study has shown that spacing repetitions had a beneficial effect not only on vocabulary learning but also on reading rates. Furthermore, using the app Quizlet for vocabulary learning helped to improve vocabulary retention to a higher degree than self-study with rote learning techniques as it enables students to have a better understanding of how well they have learned the vocabulary. A further evaluation of the data available to get a better understanding of students' preferences of study modes and their effect on learning as well as the reappearance of learned items in later readings is under way.

Acknowledgement

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Learning through social media in the ecology of language learners

Bio data

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Abstract

Over the past decade, attention has focused on examining learner-centric language learning ecology. A learner-centric language learning ecology views the learners as negotiators in their own learning experience. They perceive and act upon a configuration of human, material, and discursive resources across different learning contexts to create their language learning experience, which changes according to time and space. The current study examines how language learners perceive and act upon an instruction-oriented social networking site, Lang-8, in relation to their language learning ecologies. A total of 14 active users from Lang-8 were recruited. Narrative inquiry was adopted to obtain in-depth insights into the learners' experiences. Three portraits of learners were used to illustrate the different roles on the platform employed in the construction of learning ecologies. The study contributes to social media-assisted language learning beyond the classroom, both theoretically and practically.

Conference paper

Introduction

Ecology was first introduced in the biological field to examine the relationship between humans and the surrounding environment. Since then, an ecological perspective has been applied to other fields such as anthropology (e.g., Bateson, 1972) and sociology (e.g., Hollingshead, 1947), with a focus on the human context, as well as the relationships and interactions among them. Bronfenbrenner (1979), a psychologist, put forward ecological system theory, which concerns "the progressive accommodation between a growing human organism and its immediate environment, and the way in which this relation is mediated by forces emanating from more remote regions in the larger physical and social milieu" (p. 13). Barron (2006) proposed a learning ecology framework, aimed at understanding adolescent learners' learning across various settings (e.g., the classroom, home, and community, etc.). In language learning, particular attention has been paid in examining learner-centric language learning ecology. A learner-centric language learning ecology views the learners as negotiators in their own learning experience. They perceive and act upon a configuration of human, material, and discursive resources across different learning contexts to create their language learning experience, which changes according to time and space (Kramsch, 2002).

In the field of computer-assisted language learning research, little is known about how language learners use communication-oriented technologies (e.g., social networking sites and blogs, etc.) for their language learning. However, such technologies are believed to be useful tools for language learners to access authentic languages and audiences, providing opportunities to use the language students learned in the classroom in a meaningful context outside it (Bloch, 2007; Lee, 2010). Hence, the current study aims to maximize the potential of communication technologies in self-initiated learning beyond the classroom by examining the roles of Lang-8 (a communication-oriented technological resource) in the construction of language learners' learning ecologies.

Theoretical framework

The current study adopted an ecological perspective to understand language learners' perceptions and use of Lang-8. Bronfenbrenner (1979) argued that the ecology of human development involves "mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts in which the settings are embedded" (p. 21). He defined the ecological transition as a change in the role or setting, or both, which occurs over the lifetime of a person. The ecological transitions of learners were found in Barron's (2006) study. She suggested that learning happens across boundaries, from a school context to an out-of-school context. In her learning ecology framework, she included school, home, community, work, peers, and distributed resources, and discussed how learners' interests and skills in ICT literacy developed within various contexts. Early works distinguished different characters between in- and out-of-class learning (e.g., Scribner & Cole, 1973). However, using an ecological perspective to examine learning, the relations and interactions among learning in different contexts should also be noted (Barron, 2006). Lai (2015) specified the relationship between in-class learning and out-of-class learning among university students in Hong Kong, indicating the interaction between out-of-class learning and in-class learning. The ecological perspective also highlights the learners' agency in making use of the resources around them to meet their needs and achieve their goals (van Lier, 2004; 2010). Luckin's (2008) learner-centric ecology of resources framework suggested that it includes both objects and people. In language learning, the resources in the learner's ecology includes not only the material resources such as technical (e-dictionaries, online learning platforms), non-technical (books, worksheets), and human resources (teachers, peers, family), but also discursive resources such as motives and beliefs (Gao, 2010; Palfreyman, 2006; Zeng, 2018). Studies examined how language learners interact with the different resources in- and out-of-class (e.g., Gao, 2010). However, little is known about the interactions among the resources across time and settings, especially with communication-oriented technology.

In summary, the study adopted an ecological perspective to examine language learners in the context where they perceive and act upon a configuration of human, material, and discursive resources across time and settings. It aims at documenting the role of Lang-8, a communication-oriented site, in the language learners' learning ecology.

Methodology

Narrative inquiry was adopted because it provides in-depth data on learners' experiences (e.g., Chik, 2011). The current study recruited 14 active users from Lang-8 (eight Chinese L2 learners, four Japanese L2 learners, and two English L2 learners). This study mainly used participants' oral accounts of their learning histories on Lang-8, elicited through semi-structured interviews. The interviews were conducted either in English or the participants' native language (depending on the participants' preference) through online communication tools such as Skype, Line, or WeChat. The interview data were transcribed verbatim and analysed inductively through a cyclical and evolving process (Saldaña, 2015). Thematic analysis was employed, in which initial codes were generated, then themes were searching for, defined, and named (Braun & Clarke, 2006). In-vivo coding was used in the initial coding process. After analysing and grouping the initial codes, two themes were generated: (a) language learners' use of Lang-8, and (b) the shaping force of the learners' use of Lang-8. The data from the interviews were triangulated through the log data, as well as

the content of their online posts. Then quantitative analysis was performed on the log data to understand the learners' actual behaviours on the platform. The content of the posts was qualitatively analysed to understand the nature of the posts, the discourses in the posts, and the interaction between the learners in the discussion forum.

Findings

The aim of the current study is to understand the role of a communication-oriented technology in the construction of language learners' learning ecologies. Three Lang-8 user portraits will illustrate the different roles of the platform in the construction of learning ecologies: 1) the platform supplements the learning activities in the classroom; 2) the platform bridges the learning activities supported by other types of technological resources out-of-classroom; and 3) the platform was positioned and re-positioned in accordance with the development of the learners' discursive resources in the learning ecology.

The Platform Supplements the Learning Activities in the Classroom

It was found that participants actively use Lang-8 to compensate for limited learning activities in the classroom. Students reported that they sometimes lack opportunities to use "practical" and "authentic" language, which they believe are basic or common expressions used when communicating with native speakers. Hence, they tend to use those expressions on Lang-8.

"Our teachers have their own teaching plans. We learned about vocabulary and drill-practiced them...there were lots of exercises in the textbooks, but we had limited opportunity to truly use them in a meaningful context" (Leo, March 2018).

"I attended the beginner level course two years ago, and what I learned during this time was closely related to my daily life. However, I am studying Business Chinese this semester, which is less relevant to my life. Therefore, I tried to post diaries on Lang-8 to practice what I had previously learned" (Leo, September 2018).

"We are able to read newspapers in class, but I still want to improve my language skills for everyday discussions, so I mainly share my daily experiences on Lang-8" (SK, January 2019).

These examples show that Lang-8 acts as a supplement to the limited learning activities in the classroom—due to the limited use of communicative language in this context. Some participants also reported that they did not receive enough classroom exercises. As a result, they tended to use the language they learned in class when they posted blogs on Lang-8. As Arvehisa stated, "I do not have many opportunities to practice what I have learned in class, so instead, I post blogs on Lang-8 to apply my knowledge" (Arvehisa, December 2018).

However, it should be noted that students rarely brought their out-of-class learning experiences back to the classroom. Some of the reasons included, "I never thought about doing so before"; "I do not have a very close relationship with my teachers".

The Platform Bridges the Learning Activities Supported by Other Out-of-classroom Technological Resources

Unlike the one-way relationship between student experiences on Lang-8 and their in-class learning, the participants showed a tendency to integrate all of their out-of-class learning activities. For example, apart from posting blogs on Lang-8, Bill also watched free learning videos on YouTube. He then wrote down what he had learned in the videos on Lang-8. If he missed something, he asked for help on Lang-8, and provided video links on his blogs. These blogs constituted a large proportion of his posts at the beginning stage of his Japanese learning. When he started to read Japanese textbooks during the later stages of his learning, he encountered more difficult linguistic issues. However, he found that the native speakers from Lang-8 could not provide detailed and professional explanations. Thus, he instead used WordReference Forums to enquire about tricky grammar issues and to "receive detailed explanations from professional linguists". Another Chinese language

learner, Kim, perceived Lang-8 as a potential avenue to extend interactions with native Chinese speakers on other instant messaging applications, where “the dialogue and the relationship between [them] were close, and the words were more intimate”.

Therefore, language learners actively selected different platforms based on the perceived affordance of each technological resource in their learning ecologies. Furthermore, they actively integrated all of their out-of-class material learning resources in order to meet various learning needs.

The Platform was Positioned and Re-positioned along with the Development of Learners’ Discursive Resources

An ecological perspective examines language learning with technology as a dynamic process. This study found that language learners repositioned Lang-8 in response to their discursive resources—especially if their learning motives or beliefs changed. Using Bill and Kim as examples, although both used Lang-8 differently over time, their positions of the platform showed different patterns, which could be due to their learning beliefs and motives.

Bill, for example, mainly had three stages of using Lang-8. The two scenarios presented above were the first two stages: questions about transcribing YouTube videos and grammar questions. The third was confirming meanings after reading meaningful and authentic Japanese materials, such as comics. However, to examine the nature of Bill’s blogs, it was found that he mainly perceived Lang-8 as a “help-seeking” platform. According to Bill, he tended to learn the language rather than use the language. He also believed that “one should learn writing systematically from teachers”.

However, Kim’s case showed dramatic changes in terms of how he positioned Lang-8. In this instance, he went through the process of using “a proofreading site for writing practice”, “a self-expression, emotion regulation, and social networking site”, and “a proofreading site to support authentic language use”. This ongoing process was a result of the ongoing changes in his learning motives at different stages. Kim just wanted to practice writing at first, but later, he tried to “use” the language to serve his purposes, such as expressing himself, making friends, and sharing his country’s culture with others. To further examine the shaping forces of Kim’s learning motives, one of the reasons was the positive feedback he received from Lang-8 as well as conversations he had with native Chinese people during his work. According to Kim, the positive feedback he received from Lang-8 made him more open to interacting with strangers online, and his conversations with native Chinese people inspired him to use the online platform to introduce more cultural-related topics with others.

In summary, this finding provides evidence that supports the dynamic nature of language learning with out-of-classroom technology. The (re)positioning of technology tools is an ongoing process that corresponds with the development of learners’ discursive resources, which might be mediated by human relationships in both the virtual and physical world.

Discussion

In summary, the current study suggested three roles of Lang-8 in the construction of a learner’s learning ecologies: 1) the platform supplements learning activities in the classroom, 2) the platform bridges the learning activities that are supported by other types of out-of-classroom technological resources, and 3) the platform was positioned and re-positioned along with the development of learners’ discursive resources in the learning ecology. First, the study agrees with previous research that students extend and enliven their in-class learning and compensate for the limitations of their in-class learning through technology out of the classroom (Lai, 2015). It can be concluded that students’ use of out-of-classroom technology is affected by the learning experience in the classroom context, where it is mostly directed by teachers. However, it should be noted that the participants rarely discussed their out-of-classroom learning experience with their teachers in the class. Based on this reason, teachers may lack basic knowledge about the learning needs of students or the limitations of in-class learning activities. However, language learners showed a strong tendency to use their agency to integrate all other out-of-classroom

material resources. The term agency is defined as "the socioculturally mediated capacity to act" (Ahearn, 2001, p.112), emphasizing its situated nature. Huang and Benson (2013) believe that agency is a necessary condition for autonomous learning. Learners' agency is highlighted in an ecological perspective (van Lier, 2010). However, this study showed that students' agency might be constrained by in-class learning. This might be due to a curriculum-oriented teaching plan that lacks the flexibility to integrate students' learning experiences into in-class learning. Another reason might be due to the loss of interaction between the student and teacher. Bronfenbrenner (1979) argued the development in the ecology is largely influenced by the interactions with other people in the setting where the developing person exists. Previous language learning research suggested that the language learners' social relations with the people around them such as teachers, peers, and family have an impact on their learning experience both directly and indirectly (which might be mediated by their discursive resources) (Zeng, 2018). This study is consistent with previous studies and further supports the idea that social relations in the physical and virtual world both have a significant impact in this domain.

Therefore, to enhance language learners' use of technology out-of-classroom, the following suggestions are provided for language teachers and educational technology designers: To encourage students' out-of-classroom language learning, teachers should integrate the students' learning experiences out-of-classroom into the classroom. As for educational technology designers, an ideal learning platform should provide affordances to embrace learners' multiple learning experiences, which vary in different contexts. Moreover, for communication-oriented technologies, it is important to enhance the learners' attachment to their peers or the learning community.

Conclusion

In conclusion, this paper presented the roles of a communication-oriented technology platform in the ecology of language learners. The findings of this study provide an insight into the nature of language learning with technology out-of-classroom as well as provide suggestions for language teachers and educational technology designers.

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Social interactions of online learning community of pre-service teachers in developing a corpus-based pedagogy for addressing common L2 language mistakes of Chinese learners

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Abstract

This research aims to investigate how corpus literacy & pedagogy is developed among a group of pre-service teacher students who formed an online community of practice (CoP) by completing several learning tasks involving both intra- and inter-group interactions. Both qualitative and quantitative data were collected and analysed, covering both the learning process and outcome of the student teachers. The results show that such a corpus-based training enhanced by an online CoP is effective in providing a good corpus literacy for our pre-service teachers, and allows them to further develop corpus-based knowledge and skills to design appropriate learning and teaching materials. In addition, some interesting findings regarding both the intergroup and intragroup interactions among the online CoP are revealed and discussed.

Introduction

Community of Practice (CoP) can be understood as a group of individuals who share a common concern or passion for something they do and learn how to enhance their competences, through their regular interactions with each other (Wenger, 2010).

For this reason, interactions are essential in the processes of practices and sharing among community members and responsible for their successful learning (Hoadley, 2012). In the context for training L2 teachers, corpus linguistics has great potential to help language teachers develop a corpus-based pedagogy (Reppen, 2010). This research aims to investigate how a corpus-based pedagogy is developed among a group of pre-service teacher students who formed an online CoP by completing several learning tasks involving both intra- and inter-group interactions.

Literature

Corpus literacy

Corpus linguistics has firmly established itself as an innovative and effective approach to language studies and analyses. However, a corpus-based linguistic approach remains largely unknown to the majority of the professional teaching community due to various reasons, i.e., problems with hardware, limited computing skills, scarcity of free and user-friendly corpus resources (Römer, 2010; Tribble 2012), and lack of willingness among teachers to develop corpus literacy (Zareva, 2017). It is common for language teachers (pre- or in-service) to rely on an intuition-based approach to solving language issues as well as developing pedagogical materials. Corpus literacy can be defined as "the ability to use the technology of corpus linguistics to investigate language and enhance the language development of students" (Heather & Helt, 2012, p. 417). Nonetheless, very few studies have investigated how to develop corpus literacy among pre- or in-service language teachers with a few exceptions (Heather & Helt, 2012; Leńko-Szymańska, 2014; Zareva, 2017).

Community of Practice (CoP)

Through the participation in a learning community, meaning is rendered public and shared (Bruner, 1990). The term "community of practice" is originated from a research project in the social learning field by Jean Lave and Etienne Wenger in 1990 and subsequently developed into a major ideology in the field (Lave & Wenger, 1991). Traditionally, CoP is recognized as a social constructivist approach in which learning is seen as an ongoing process where learners engage in cognitive construction of existing knowledge and develop new knowledge through sharing, conversation, and negotiation processes within the community (Sharples, Taylor, & Vavoula, 2007). In order to ensure a shared understanding of the learning objectives and develop a common purpose for gathering a genuine learning community (Graham & Ferriter, 2010), the participants (researchers and research subjects) of this research must gather from time to time in the physical setting, so as to review the learning outcomes.

Social Interactions

Social interactions have been recognized as an important form of social mechanism that provides vital cognitive and social support in the students' learning engagement, especially for contexts outside classroom (Merry & Orsmond, 2008). Within the context of a learning community, interactions are essential in the processes of practices, sharing among community members and responsible for their successful learning (Hoadley, 2012). Traditionally, intragroup dynamics is a common area of study in organizational and social contexts (Mateeva & Dimitrov, 2013). Research into intragroup interactions has also drawn the attention in the field of language learning in recent decades (Storch, 2002; Zhu & Li, 2017). Comparatively, intergroup interactions (eg., the influence of peer feedback from other groups on the final writing product) is rarely researched, let alone in the field of language learning. The research focus of this paper will focus on both intragroup dynamics and intergroup relations as the primary forms of social interactions to be studied.

Research context and research questions

In the context for training L2 teachers, corpus linguistics has great potential to help language teachers design language learning and teaching activities (Reppen, 2010). Few studies investigate how to develop corpus literacy among pre- or in-service language teachers with a few exceptions (Heather & Helt, 2012; Leńko-Szymańska, 2014, 2015; Zareva, 2017; Lin & Lee, 2015). While showing varied degree of success in experiencing corpus-based training materials, the results gain little insights into teachers' actual skills in the application of corpus-based materials in real classroom settings. In other words, most of the existing studies only succeed in developing the teachers' corpus literacy, i.e., how to use corpus tools for learning purposes, but little has been done to investigate how this acquired corpus literacy can be developed and incorporated into the teachers' pedagogy repertoire. In addition, it is common for participants to complain about the monotony of concordance-based activities and a lack of interaction among participants (Leńko-Szymańska, 2014), as well as encountering difficulty in figuring out what can and cannot be done with corpus data (Zareva, 2017). Using an innovative approach, involving appropriate use of technology and encouraging interaction among participants as an online learning community, may add more fun elements to the training programme and hence motivate student teacher participants to be more engaged in the teacher-training course featuring corpus use that aim to develop both their corpus literacy and pedagogy for language teaching in future. This study will address the following research questions:

1. To what extent can student teachers develop their corpus literacy and corpus pedagogy respectively via an online learning community?
2. How do intragroup and intergroup interactions among the online learning community contribute to their learning outcome?

Methodology

Participants and research site

The research took place in a university of Hong Kong as a MA course that trains pre-service teachers of English mainly for Hong Kong, mainland China or other Chinese-related countries/regions. After receiving input from physical lectures and workshop on corpus training, student teachers were invited to attend online sessions where they worked collaboratively and interactively to deepen their learning. Then the participants were formed into groups to complete a group task design where they have to design some vocabulary learning and teaching activities to address the common problems or learning difficulties encountered by Chinese students of English learners (primary or secondary level). Examples include how to learn adjectives ending with -ing and -ed (interesting vs. interested), how to differentiate 'economical' from 'economic', and how to use the connectors 'however' and 'but' accurately.

The online sessions were facilitated by the Moodle online learning platform, which served as the virtual classroom as the second part of a flipped learning course. This virtual classroom included various forms of learning spaces: the activity session, where materials and documents are uploaded students' reference and use; a discussion forum, where the students could upload their work to be commented by other groups; and a name list where the students could view all other participants of the online course. The main board of the activity session is where the researchers posted the instructions for the task. Once the groups' works are uploaded to the general forum, their group work can be commented by students from other groups, where information related to the group task design will be discussed. The discussion forum can function as a space for uploading files and eliciting comments. Throughout the processes of the task, the researchers were available for consultation.

Data collection

Both qualitative and quantitative data were collected for analysis: (1) a self-designed survey consisting of both Likert-scale questionnaire were sent to participants at the end of the project to measure their learning on corpus literacy; (2) the initial and final versions of the group work were collected for analysis to measure their learning on corpus-based

language pedagogy and efforts made in addressing other groups' comments; (3) the comments provided on each other group's task design were analysed to unveil intergroup interactions; (4) interviews were used to probe into the mechanism of intragroup and intergroup interactions. The quantitative data were tabulated with descriptive statistical information (e.g. mean, standard deviation or frequency). All qualitative data were coded and checked by two researchers. Discussions were used to resolve all disputed codes and patterns till an agreement was reached.

Results

The development of Corpus literacy

Mukherjee (2006) included 4 essential aspects for corpus literacy which are: (1) understanding what a corpus is; (2) knowing what can and cannot be accomplished with corpus data; (3) acquiring the skills to analyse concordance lines; (4) knowing how to summarise language use patterns/trends from observing corpus data. Based on these four components of corpus literacy, a survey was developed, comprising five sub-sections of 16 6-point Likert-scale items to measure student teachers' development of corpus literacy at the end of the corpus-training. Two separate sections, namely "advantages of using corpus data" and "limitations of using corpus data", are developed to measure the component "knowing what can and cannot be accomplished with corpus data" following Mukherjee's (2006) definition of corpus literacy. See Table 1 below for the results of the survey.

Table 1. Survey results for corpus literacy.

N=40	No. of items	Sample item	Mean (max.=6)	SD
Understanding of corpus data	4	e.g. I understand what a concordance line is	5.39	0.78
Advantages of using corpus data	3	e.g. I can draw conclusion about language use after searching corpus data	5.00	0.81
Limitations of using corpus data	3	e.g. I'm aware of the limitations of using corpus data for language teaching	4.76	1.21
Search skills of corpus data	3	e.g. I know how to search words in corpus data	5.24	0.78
Analysis of corpus data	3	e.g. I will examine the words before or after the key word in concordance lines	4.92	0.91

The table shows that students in general self-perceived that they had developed a good corpus literacy by attaining a mean of around 5 (out of 6) in all five sections that comprise corpus literacy. The highest mean (5.39 out of 6) is "understanding of corpus data", indicating that participants have developed fairly good knowledge of what a corpus is and the nature of corpus data.

Competence in developing corpus-based teaching materials for Chinese students' L2 learning (English)

One important indicator for measuring to what extent the student teachers addressed the needs of Chinese students' learning of English as L2 is to examine the selection of the topics in their group task design, i.e., whether the student teachers could select some pair of words/phrases that are deemed to be easily confused by Chinese learners and come up with some corpus-based learning and teaching activities to help Chinese learners differentiate the pair in question. The information of topic selection in the task design is summarised in the following table.

Table 2. Analysis of the choice of topics in the group task design.

Group	Language Focus	The analysis of the choice of the topic and to what extent the choice could address Chinese students' difficulty or needs in learning English as L2	Corpus used in designing the activities	Target Level of the students
A	<i>get to vs. get up</i>	1. "get to" and "get up" are not the common phrasal verb pairs Chinese students mix up. Suggestion → better choose "get out" and "get off" 2. Phrasal verbs of "get to" and "get up" are too easy for secondary school students	Lextutor	Junior Secondary level
B	<i>apply to vs. apply for</i>	Appropriate -Chinese learners use "apply" a lot but they may be confused by which preposition, i.e., "to" or "for", should be used	Words and Phrases	Junior Secondary level
C	The synonyms of "important" / "very"	Appropriate - Synonyms of "important" and "very" are useful in writing	COCA	Junior Secondary level
D	<i>alone vs. lonely</i>	Appropriate -Both English words share a similar translation "孤獨的" and may be easily confused by Chinese learners	Lextutor	Junior Secondary level
E	<i>economic vs. economical</i>	Appropriate - Economic and economical are two easily mixed up words	COCA	Secondary level
F	<i>make vs. do</i>	Appropriate - a common mistake for Chinese students in writing - the corpus chosen may be a bit difficult for primary level but the design made the activities quite manageable by upper primary level students	COCA	Upper Primary level
G	<i>agree to vs. agree with</i>	Appropriate	Lextutor	Secondary level
H	<i>however vs. but</i>	Appropriate - a common mistake for Chinese students in writing as both words share a similar Chinese translation	Words and Phrases	Junior Secondary level

As seen from the table, 7 out of the 8 topics are considered to be appropriate selections that may address the learning needs and difficulties that target Chinese L2 students encounter, particularly, in helping them differentiate some easily confused pairs of words/phrases due to both inter- or intra-lingual influences. The selection of the lexical pair is also suitable for the level of the target students (primary or secondary).

A panel of two teachers who have expertise in corpus linguistics and its implications in language education evaluated all group task design against three marking criteria: (1) use of pedagogical content knowledge, (2) implementation of teaching and learning activities, (3) language accuracy. The scores and ranking of all group work are provided in the following table.

Table 3. The quality of group work as rated by teachers.

Group	Scores (Max. = 60 100%)	Ranking
C	58 (97%)	1
F	56 (93%)	2
D	55 (91%)	3
G	53 (88%)	4
B	51 (85%)	5
E	49 (82%)	6
H	46 (77%)	7
A	43 (72%)	8

As can be seen from the table, all groups achieved at least 70% of the full the scores, which were evaluated separately and agreed upon by two teachers, reflecting a rather high competence of the corpus-based language pedagogy achieved by the student teachers themselves.

Intragroup Interactions

With reference to Li and Zhu's (2017) framework for analysis of intragroup interactions, the interview results show that different groups adopted different interaction patterns. Efforts are made to see if such interaction patterns are associated with the learning outcome. The interaction pattern for each group and their achievement (i.e., ranking of their group work, see Table 3 above) are compiled for readers' convenience.

Table 4. The interaction patterns of all groups.

Group	No. of groupmates	Interaction pattern	Ranking of the group work
C	4	Expert/novice (Mid-low Equality, High Mutuality) -the group leader Tommy had more share of the task and managed the overflow of the task completion; -Tommy communicated with each member separately whereas there was relatively low interaction between other groupmates.	1
F	4	Dominant/defensive (Low Equality, Low Mutuality) -the group leader Katie held lots of group discussions and convinced her groupmates by adopting her ideas finally); -Katie had more share of the workload and managed the overflow of the task completion.	2
D	4	Expert/novice (Mid-low Equality, High Mutuality) -the leader May guided each member and controlled the quality of their work	3
G	4	Cooperating-in-parallel, High Equality, Middle-low Mutuality -high mutuality between Candy and Alice; -low mutuality with/between other groupmates	4
B	4	Cooperating-in-parallel (High Equality, Middle-low Mutuality) -high-mutuality between Cathy and Lily; low mutuality with/between other groupmates	5
E	5	Cooperating-in-parallel (High Equality, Middle-low Mutuality) -each member managed the task in different perspectives and helped with others' part, e.g., making comments on and providing suggestions for others' work)	6
H	3	Cooperating-in-parallel (High Equality, Middle-Low Mutuality) -occasional discussion in the task design process and in the final stage of finalising the group work	7
A	4	Collective (High Equality, High Mutuality) -group discussions were conducted all the time and all groupmates completed together all parts in the task design	8

The table shows that the most commonly adopted intragroup interaction patterns are cooperating-in-parallel, i.e., the workload is equally distributed among all groupmates who each completed independently their own part and then assembled everything together; some discussion and synthesis of ideas may take place when it comes to the stage of finalising the group work. However, these groups' work is not necessarily of top quality. Instead, the two groups (C and D) who adopted the expert/novice (mid-low equality, high mutuality) pattern are ranked the first and third, showing a high achievement of their learning outcome. Interestingly, the group F adopting a dominant/defensive pattern (low equality, low mutuality) also had a high achievement in its group work, being ranked the second place. It is revealed from the interview data that the group leader, Katie, insisted on using her ideas in the task design and disregarded many of the ideas proposed by her group mates. However, the group leader had lots of group discussions with other groupmates who eventually agreed that the Katie's ideas were better after some lengthy 'arguing'. After examining the interview data, it is revealed that all group leaders in the four groups with the best performance (C, F, D and G) had played a key role in managing and executing the group tasks; all leaders share two same characteristics: (1) they have a great interest in using corpus data for language learning and teaching and (2) they are

highly motivated in applying what they had learned from the training to the task design. They can be considered as “star students” who have the highest competence in corpus literacy & pedagogy, made special efforts in completing and managing the overall task design, helped their group mates with various aspects and had taken more workload accordingly. Despite relatively low equality, high mutuality or frequent discussions/negotiations among group members are generally observed for these high-achieving groups.

By sharp contrast to Li and Zhu’s (2017) study where the groups adopting a collective pattern had the highest achievement, the group (A) from the current study, adopting a collective approach with both high equality and mutuality, had the lowest achievement, even though their task design was evaluated to have achieved 70% of the total score by the teachers. For this group, there is not a “strong” group leader as for the top-achieving groups who provided guidance, scaffolding and assistance for all members. Instead, the members in this group made all decisions and completed each step of the task design together.

Intergroup Social Interactions

The main platform for intergroup interactions to take place in this study is when each group was asked to upload their group work online, other group members provided comments for the group to improve the task design, and the group concerned addressed the comments, revised and reposted online their task design. The following table provides the quantitative information of the comments (e.g. suggestions for improvement) together with the revisions made by each group.

Table 5. The intergroup interactions for all groups.

Group	Ranking	Suggestions	Revision as Response to Comments	Self-initiated Revision	Total revisions
C	1	9	5	1	6
F	2	9	3	2	5
D	3	6	4	4	8
G	4	3	2	3	5
B	5	1	1	0	1
E	6	4	1	0	1
H	7	3	1	0	1
A	8	4	1	2	3

The trend is clear that the groups which made more efforts to address comments and made more revisions are associated with high quality of work, i.e., groups C, F, D and G. These groups selected and addressed more suggestions for improvement in the final versions of task design; they also made more efforts to make self-initiated revisions to improve the quality of the work. It is further discovered that it is the leaders of these groups who decided on which comments to address and made the corresponding revisions. Again, it seems that the group leaders who have high corpus literacy & pedagogy critically reviewed all comments and decided to address the most crucial comments in revising the final version of the task design. It can be concluded that the groups that possess a higher degree of willingness in incorporating other groups’ comments in the revised task design tend to demonstrate better quality in their revised group tasks. Thus, the ideas and comments from intergroup social interactions are as important as the intragroup interactions to the improvement on the group task design, but the effectiveness of such intergroup comments may depend, to some extent, on the wise decisions and subject knowledge of the group leaders.

Discussion & Conclusion

In this study, a lively online CoP is formed by physical workshop training, online learning and group task design. The intragroup and intergroup interactions centred around the group task design mediated by online technologies greatly enriched and energised the learning of the community members, and facilitated the completion of the group task. As a result, our student teachers had a high self-perceived competence in their development

of both the corpus literacy and corpus-based language pedagogy. This finding is verified by the relatively high-quality of the group task design graded by the teachers. In addition, the majority of our student teacher participants are able to make an appropriate selection of topics in their task design that can address the common problems or difficulties that Chinese L2 (English) learners encounter.

This study also reveals some interesting findings regarding intragroup and intergroup interactions. The best achieving groups all are led by a 'star' student as group leader who played a key role in guiding and helping all the other groupmates in their learning process of completing the group work. It is the group leader who pushed and motivated the group members, and controlled the quality of the part designed by other group members. As a result, there is low equality in workload distribution and leaders necessarily undertook more workload than other groupmates. Despite a lack of equality, these top-achieving groups all possessed relatively high mutuality, e.g., the group leaders would maintain a good communication channel with all the other groupmates and they listened, discussed and resolved the problems together with other groupmates in the task design process. The result of this study shows that it is not the equal workload distribution, but the relatively high mutuality among all group mates, including discussion, arguing, seeking help, offering comments or solutions, etc., that tends to be associated with high quality of group work. In this sense, the definition of mutuality not only means "the level of engagement with each other's contribution" (Storch, 2002, p. 127), but also includes *the willingness to discuss each other's ideas and make appropriate decisions in the design of group work*.

In addition, the intergroup interactions play an important role in improving the final version of group work. All top-achieving groups made efforts to address more comments in the task design than those relatively low-achieving groups. Furthermore, these top-achieving groups all adopted a judicious approach, only selecting to address some crucial comments rather than all comments. Again, it seems that the group leaders of these top-achieving groups played a key role in deciding what comments to address and how to revise the final versions.

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A study on the teacher-student relationship in interactive-technology-enhanced English classrooms in Taiwan

Bio data



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Abstract

Numerous interactive technologies have been invented nowadays to help learners learn more effectively. However, literature has shown different results of applying interactive technologies in teaching and learning in terms of student-teacher relationship. Therefore, in order to shed more light on the differences of student-teacher interaction and student engagement between interactive-technology-enhanced and traditional instructions, this study partially adopted Australian Survey of Student Engagement (AUSSE) to investigate student engagement in both language learning environments. A sample of 179 freshman undergraduates in Taiwan are required to complete the questionnaire online during the 2018-2019 academic year. The results inform us that an interactive-technology-enhanced instruction, ZUVIO, does have a positive impact on student-teacher interaction and student engagement in language learning environment.

Key words: Interactive technologies, ZUVIO, student-teacher relationship, student engagement

Conference paper

INTRODUCTION

Studies have indicated that learners tend to reveal more behavior problems and poorer academic performance when they have negative relationship with their teachers (Baker, 2006; Pianta, 1995; Pianta & Stuhlman, 2004). Moreover, it has been reported that when confrontations occurred between teachers and students, students are less engaged and less likely to enjoy learning. This vicious circle eventually results in poorer academic achievement (Ladd & Burgess, 2001). This stresses the importance of teacher-student relationship to students' learning outcome.

In this present study, we wish to find out whether there are positive correlations between teacher-student relationship and student engagement. Recently, research on teaching and learning in higher education has revealed great interest in the use of interactive technologies to enhance classroom engagement for "digital-native" students. Due to the ubiquitous availability of mobile devices for each individual, interactive technologies have begun to be widely used in the teaching field (Ding & Li, 2011; Neo & Neo, 2004). Using mobile to assist language learning can create spontaneous interactions with every individual in the classroom. Because learners are expressing their ideas via their own mobile devices, the learners feel a greater sense of freedom. Studies have shown that using digital devices to assist learning can not only increase student extrinsic motivation without causing higher pressure, but also enhance students' conceptual understanding (Pei-Luen et al., 2008; Zacharia, Lazaridou & Avraamidou, 2016). Thus, we wish to find out whether implementing interactive technologies in language classroom can increase learners' learning motivations and invite more active learning. We attempt to answer the following questions: (1) To what extent does interactive-technology-enhanced instruction have impact on teacher-student relationship? (2) To what extent does interactive-technology-enhanced instruction have impact on student participation in class?

LITERATURE REVIEW

Teacher-student relationship

Researches have shown that students tend to reveal long and lasting learning motivations when they have strong connections with their instructors (Flood, Lapp, Squire & Jensen, 2003; Spiro, Coulson, Feltovich & Anderson, 1987). This statement clearly stated the importance of having supportive teacher-student relationship. Students feel more secure and therefore lower the learning anxieties when their relationships with the instructors are well and supportive. Pianta (1999) defines the student-teacher relationship, as "emotions-based experiences that emerge out of teachers' on-going interactions with their students." It is suggested that students tend to behave and engage more in the classroom activities when they considered the teachers as friends and protectors. When the students were more behaviorally and emotionally engaged, their academic achievement would improve (Hughes, Luo, Kwok, & Loyd, 2008; O'Connor & McCartney, 2007).

Although the aforementioned literature shows the importance of having good teacher-student relationship, evidence regarding the effect of students' emotions in class and their academic performance is mixed. Studies using measures of emotional engagement combined with behavioral engagement (Borman & Overman, 2004; Connell, Spencer, & Aber, 1994; Sirin & RogersSirin, 2004) have generally found a positive relationship between engagement and academic performance. However, in PISA (Willms, 2003) and Finn's (1993) studies, students' academic performance was not positively associated with their emotional engagement with the school or teacher. In order to clarify this mixed argument, we wish to see whether using ZUVIO in language class can enhance teacher-student relationship, and in turn, raise students' long-term learning motivations.

Interactive technologies

Recently, research on teaching and learning in higher education has revealed great interest in the use of interactive technologies to enhance classroom engagement for "digital-native" students. Due to the ubiquitous availability of mobile devices for each individual, interactive technologies have begun to be widely used in the teaching field (Ding & Li, 2011; Neo & Neo, 2004). Using mobile to assist language learning can create spontaneous interactions with every individual in the classroom. Because learners are expressing their ideas via their

own mobile devices, the learners feel a greater sense of freedom. Studies have shown that using digital devices to assist learning can not only increase student extrinsic motivation without causing higher pressure, but also enhance students' conceptual understanding (Zacharia, Lazaridou, & Avraamidou, 2016). Thus, we wish to find out whether implementing interactive technologies in language classroom can increase the chances for teacher-student and peer interactions. Moreover, we wish to see if this change of classroom dynamics can enhance teacher-student relationship.

ZUVIO is a cloud-based interactive system developed by NTU electrical engineering alumni in 2012. This online interactive system allows students to communicate with their peers or teachers using various internet devices (e.g. smart mobile phones, tablet PCs, laptops or desk computers). Since teachers can receive instant feedback from the students, they can adjust their teaching contents anytime depending on students' responses. It soon draws attentions from college faculties in Taiwan because it is easy to use and does not require additional transmitter. Students can use their own digital mobile devices to connect to ZUVIO platform. Through the wireless communication, teachers and students can execute learning activities in a low-cost and individualized manner (Lee and Shih, 2015; Melero et al., 2015; Tan et al., 2014). ZUVIO system mainly consists of four parts: course account management system, multimedia item bank system, peer assessment system and grading system. The features are listed in Table 1.

Table 1. Four parts of ZUVIO and their features

Course account management system	Teacher can add different courses and enroll different students in the classes.
Multimedia item bank system	Teachers can create quizzes or questions in various forms, such as multiple choices, open-ended questions.
Peer assessment system	Learners with the same background assess their peers' performance. During the peer assessment, the system will update scores and rankings among individuals or groups.
Grading system	After students finish answering the questions, the statistic results can be seen immediately. From the results, teachers can tell the parts where most students make mistakes and make proper adjustment to suit learners' needs.

Methodology

Participants

The participants for this study were students of the same proficiency level based on a placement exam held before the semester began. All 179 participants were at a proficiency level not higher than CEFR A2, corresponding to the scale lower than 349 in TOEIC Listening & Reading Test. These sample students were college freshmen from six General English classes. Three of them adopted the software ZUVIO in the class (marked as experimental group, 102 students) whereas the other three applied traditional instructions (controlling group, 77 students). Except for the adoption of ZUVIO and the instructors, all six classes used an identical textbook and followed schedules alike. The differences of instructional activities between classes with and without ZUVIO are summarized in Table 2.

Table 2. The differences of instruction between ZUVIO and traditional classrooms

	with ZUVIO	without ZUVIO
Warm-up	Teacher played a short extracurricular video in English.	Teacher reminded students of today's agenda or having quizzes, and/or elicited predictions or inferences of the topic of the day.

Attendance	Students signed in on ZUVIO individually.	Teacher did a traditional roll call attendance.
Activity	Some textbook activities were done on ZUVIO, either in groups or individually.	Teacher followed the activities provided on the textbook, including previewing vocabulary, listening to conversations, etc., and students usually worked in pairs or groups.
Preview	Teacher conducted quizzes on ZUVIO after students previewed a section. Sometimes the grade distribution would be shown after the quiz. Sometimes the quiz would be re-opened for students to revise their answers after mistakes were pointed out.	Teacher briefly reminded students of what have been done in the previous lessons, and/or introduced or explained some vocabulary with photos that may be difficult for students.
Oral practices	After oral practices in pairs or groups, teacher would randomly select students on ZUVIO to perform.	Students would be asked to do pre-, during, or post-lesson activities in pairs or groups, such as discussing pictures in the textbook. After discussion, teacher would ask one person from each group to orally describe the pictures.
Listening practices	Students submitted their answers on ZUVIO	Students would be asked to do pre-, during, or post-listening activities, such as listening to the audios and answering the questions in the textbook.

Instrument

In this study, an engagement questionnaire, revised from AUSSE, was distributed online via Google Form to measure students' attitudes relevant to their interactions with the instructor and classmates, and their engagement in the General English classes. AUSSE, The Australasian Survey of Student Engagement, is extensively used and highly validated measure of student engagement in Australia and New Zealand (Radloff, 2012). It originally contains six scales including academic challenge, active learning, student and staff interactions, enriching educational experiences, supportive learning environment, and work integrated learning, consisting of approximately 130 items in total. We adopted 20 items from the first scale focusing on academic challenges and student-teacher interaction, added six more questions related to the General English course, and then translated those items into Chinese, the primary language of these students, to assure understanding. After piloting the new brief Chinese-version student engagement questionnaire, we uploaded it to Google Form, and one week before the semester ended, we invited all students in the six classes to conduct the online survey.

Data analysis

Survey data were collected during the 2018/2019 academic year, and were analyzed with the statistical software SPSS 22.0 version. The Cronbach's Alpha for the class participation questionnaire is .91. In other words, the reliability coefficients indicated high reliability for the measurement in this study.

Results and discussions

In this section, we will present the statistical results and discuss how well they answer our research questions.

Results

Let us first look at the demographic data of the participants in this study. Forty-three percent of the participants are in the controlling group and 57% are in the experimental group. Among all the participants, 56% are male and 44% are female; and 93% of participants are aged from 18-19 years old. Additionally, this sample group is very homogeneous; 97% of them are Taiwanese. In terms of colleges, 18% of them are from College of Life Science, 37% from College of Science & Engineering, 21% from College of Agriculture, 12% from Teachers College, and 13% from College of Humanities and Arts. Last but not least, 67% of the participants study English less than one hour everyday, which is understandable since the sample participants were classified as low achievers in English and they may not have much learning motivation in this subject.

We now examine the results from the engagement survey. First, we ran factor analysis and divided all the 26 items in the participation survey into four categories: Interaction with teacher, Interaction with classmates, Preparation for class, and Class participation. Next, an Independent-sample t-test was conducted to compare the degrees of participation between the controlling and experimental groups. As Table 1 shows, there was a statistically significant difference in the scores of Interaction with teacher for the controlling ($M=2.1266$, $SD=.56795$) and experimental groups ($M=2.3297$, $SD=.64887$); $t(177)=-2.185$, $p=0.030$. These results suggest that ZUVIO, did have an effect on teacher-student interaction. In other words, students in ZUVIO classes were more likely to have interaction with the instructor.

Table 1. Independent-sample t-test results comparing controlling and experimental groups on Interaction with Teacher.

Groups	n	Mean	SD	t-cal	t-crit	df	p
Controlling	77	2.1266	.56795	-2.185	-2.226	177	.030
Experimental	102	2.3297	.64887				

Next, we compare the degrees of participation between males and females. The results from Independent-sample t-test are showed in Table 2, indicating that there was a statistically significant difference in the scores of Preparations before class between males ($M=2.5967$, $SD=.59750$) and females ($M=2.7869$, $SD=.44970$); $t(177)=-2.430$, $p=0.016$. The results suggest that female students were more likely to prepare for the lessons before class.

Table 2. Independent-sample t-test results comparing males and females on Preparations before class.

Groups	n	Mean	SD	t-cal	t-crit	df	p
Males	100	2.5967	.59750	-2.352	-2.430	177	.016
Females	79	2.7869	.44970				

To shed more light on the effect of the intervention of ZUVIO on gender, One-way ANOVA was conducted to compare the degrees of participation among gender groups: controlling males and females, and experimental males and females. Table 3 shows that there was a statistically significant difference in the scores of Interaction with teacher among gender groups ($F=9.257$, $p<.000$). The results of post hoc using Scheffe test in Table 4 further indicate that there were statistically significant differences between controlling males and females ($MD=-.41934$, $p=.021$), between controlling males and experimental males ($MD=-.58130$, $p<.000$), and between experimental males and females ($MD=.41957$, $p=.007$). These results suggest that the controlling females were more likely to have interaction with the instructors than the controlling males, and that the experimental males were very likely to have more interaction with the instructor than both controlling males and experimental females.

Table 3. One-way ANOVA result of the scores of Interaction with teacher among gender groups.

ANOVA					
	SS	DF	MS	F value	Pr > F
Between groups	9.429	3	3.143	9.257	.000
Within groups	59.420	175	.340		
Total	68.849	178			

Table 4. Post hoc results of the scores of Interaction with teacher among gender groups.

(I)	(J)	Mean Difference (I-J)	Std. Error	Sig.
Con-male	Con-female	-.41934*	.13291	.021
	Ex-male	-.58130*	.12069	.000
Ex-male	Ex-female	.41957*	.11873	.007

Table 5 shows that there was a statistically significant difference in the scores of Preparation for class among gender groups ($F=5.891$, $p=.001$). Furthermore, post hoc results in Table 6 indicate that there were statistically significant differences between controlling males and females ($MD=-.47613$, $p=.002$), between controlling males and experimental males ($MD=-.35364$, $p=.016$), and between controlling males and experimental females ($MD=-.34835$, $p=.041$). These results suggest that the controlling females, the experimental males and females were all more likely to prepare for class than the controlling males.

Table 5. One-way ANOVA result of the scores of Preparation for class among gender groups.

ANOVA					
	SS	DF	MS	F value	Pr > F
Between groups	4.835	3	1.612	5.891	.001
Within groups	47.880	175	.274		
Total	52.715	178			

Table 6. Post hoc results of the scores of Preparation for class among gender groups.

(I)	(J)	Mean Difference (I-J)	Std. Error	Sig.
Con-male	Con-female	-.47613*	.11931	.002
	Ex-male	-.35364*	.10834	.016
	Ex-female	-.34835*	.12004	.041

Table 7 shows that there was a statistically significant difference in the scores of Class participation among gender groups ($F=6.871$, $p<.000$). Again, we ran post hoc test and the results in Table 8 indicate that there were statistically significant differences between controlling males and females ($MD=-.54493$, $p=.001$), and between controlling males and experimental males ($MD=-.48402$, $p=.002$). These results suggest that both controlling females and experimental males were very likely to participate more in class than the controlling males.

Table 7. One-way ANOVA result of the scores of Class participation among gender groups.

ANOVA					
	SS	DF	MS	F value	Pr > F
Between groups	7.253	3	2.418	6.871	.000
Within groups	61.579	175	.352		

Total	68.832	178			
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Table 8. Post hoc results of the scores of Class participation among gender groups.

(I)	(J)	Mean Difference (I-J)	Std. Error	Sig.
Con-male	Con-female	-.54493*	.13530	.001
	Ex-male	-.48402*	.12286	.002

Discussion

In this section, we summarize the findings and answer the research questions in this study. There are two main findings in this study; first, the participants in the experimental group were more likely to have more interaction with the instructor, which means even though the observation in ZUVIO classrooms showed that there seemed like little interaction between the instructor and the students, the learners did believe that they had more interaction with the teacher in this course. This is the only difference between ZUVIO and the traditional classrooms. Secondly, females were more likely to prepare for class than their male counterparts, and the controlling males is more likely to both prepare for class and to participate in class the least.

Based on the findings above, we try to answer our research questions. Research question 1: To what extent does ZUVIO instruction have impact on teacher-student relationship? The findings inform us that ZUVIO instruction did have an impact on teacher-student relationship; students in ZUVIO classrooms believed they had more interaction with the instructor. However, the instructor's in-class observation did not confirm these findings; he did not observe a lot of teacher-student interaction in class. This phenomenon may relate to the perceptions of learners of Net Generation. Magnani & Bardone (2011) define Net Generation as "The generation of youth which is growing up with modern information and communication technologies shaping strongly their mental models, i.e. views on the world around them." The study of Sandars & Morrison (2009) also suggest that young people of Net Generation have different methods of learning from those of previous generations, and that a large majority of undergraduates have experience of using online systems and their attitudes toward online learning be positive. Therefore, echoing the above literature, in this study students in ZUVIO instruction may believe they had more interaction with the instructor because of using an interactive learning tool which allowed them to have more connection with the instructor.

Our second research question is: "To what extent does ZUVIO instruction have impact on student participation in class?" According to the findings, ZUVIO learners were more likely to prepare for the lessons than the males in traditional instruction; and the male learners in ZUVIO were more likely to participate in class than the male ones in traditional instruction. Consequently, ZUVIO instruction did encourage male language learners to involve more in class-related activities, including preparation before class, in-class activities, and after-class assignments.

CONCLUSION

Nowadays, there are numerous interactive technologies invented to help language educators and learners to teach and learn languages, and those tools are popular for some reasons. For Net Generation, which perceives the world differently from the previous generations including us, interactive-technology-enhanced or computer-assisted instruction thus could be an effective learning model (Chen & Pan, 2016). The findings in this study confirm that the ZUVIO instruction did promote teacher-student interaction, as well as male students' engagement in terms of preparation for class and class participation. This may provide an implication for language educators that male learners are more likely to engage more in an interactive-technology-enhanced learning environment, especially

for lower achievers in language learning.

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First encounters in a virtual exchange project: analysis of students' interactions and their reflections

Bio data



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Abstract

In virtual exchange projects, first encounters are essential for successful subsequent tasks, and perhaps even more so in language-learning contexts. Propinquity is a psychological factor to be pursued since it reduces insecurities and negative feelings in social encounters. Thus, the main objective of this study is to explore the technical, communicative and affective strategies that students who participated in a virtual exchange project used in their first interactions to achieve propinquity. Data were gathered from video recordings uploaded on FlipGrid from 22 Spanish teacher trainees and 11 Icelandic students of Spanish, and from their reflection reports taken from an online questionnaire and their learning portfolios. The results show that this first asynchronous video encounter has proved useful since it helped them to reduce anxiety, provided a good emotional atmosphere and fostered their motivation towards subsequent tasks in the telecollaboration project.

Introduction

In any social interaction emotions play a role and influence our behaviour and reactions (Marinetti et al., 2011). In virtual exchanges such as a one-to-one synchronous learning environment, mixed feelings are acting together at different levels of intensity (Chen & Lee, 2011). Students may feel anxiety because of an online meeting with someone unknown but at the same time, they may feel excited to meet someone from another culture. In foreign-language education contexts, we should also consider students' apprehension of communication (Horwitz, 1986) or students feeling insecure as not being in full command of the language they are learning (Horwitz et al., 1986; Dewaele, 2013; Dörnyei & Ryan, 2015). Thus, the initial contacts of students in virtual exchanges are key for the success of any telecollaboration program, since they determine the way learners are going to relate to one another in the process of developing collaborative tasks that benefit both parties' learning.

The context of the study is a virtual exchange program (O'Dowd, 2018) between Icelandic learners of Spanish from the University of Iceland and teacher trainees of Spanish studying for their master's degrees at the University of Barcelona. Virtual exchange is a common pedagogical approach in foreign language education which involves online collaboration projects in different formats, i.e. e-tandem (O'Rourke, 2007) and telecollaboration (Dooly, 2017). This telecollaboration project, which pairs language learners and pre-service language trainees, proposes different communicative tasks that must be completed collaboratively using different formats of interaction (videoconferencing, WhatsApp and so on). The model of this virtual exchange is not based on a bilingual exchange and does not focus only on intercultural issues (O'Dowd, 2019) but on developing complementary competences although having different learning goals: one group of students wants to practise Spanish and the other wants to practise how to teach it online.

The first task of the project consisted of recording a video introduction of themselves on Flipgrid as a way to start getting to know one another and as a preliminary task for the first one-to-one video conferencing encounter. Flipgrid is a video discussion platform where teachers can create a grid on a topic and students, using any mobile device, can upload short videos (up to 90 seconds in the free version) responding to the topic in question. The University of Barcelona (UB) students had to introduce themselves and invite the University of Iceland (HI) students to choose them as future partners. On their behalf, HI students had to watch all of the videos and record messages in response to their three favorites. The telecollaboration tutors considered the preferences expressed on Flipgrid to match students. Since the group at HI was smaller than the one at UB, each HI student was paired with one or two UB students for this first task. The following week, HI students were asked to conduct a videoconference with their partner or partners. They were asked to share personal pictures related to different times in their lives. This was used as an ice-breaking task that would allow UB students to perform a needs analysis.

Electronic propinquity

Electronic propinquity has been described as the sense of proximity, involvement and presence over any digital communication environment, all of which leads to satisfaction towards interaction (Kozernny, 1978). According to Walther & Bazarova (2008), propinquity is strongly associated with satisfaction, communication effectiveness and task accomplishment. In computer-mediated communication, propinquity is expressed and perceived in innovative ways: emojis, humour and likes are relatively new ways of making digital conversations "closer and warmer". Propinquity is a concept that is closely related to social presence in e-learning (Anderson & Garrison, 2003), where it is considered a key element in terms of fostering interaction and learning, since the sense of belonging to a learning community motivates students and lowers their anxiety levels (Garrison, Anderson & Archer, 1999). Actions such as reciprocation, smiling, asking questions, or off-task chatting, have been pointed out as being relevant to language-learning videoconferencing (Satar, 2015).

Methodology

Objective

The main objective of this study is twofold: first, to explore how students who participated in a virtual exchange project used different communicative strategies in their first interactions to start developing propinquity with their interlocutors, and second, to explore the students' emotions and reactions of their first encounters.

Data collection and analysis

Data were gathered from video recordings uploaded in Flipgrid and students' reflections of the strategies used from an online questionnaire. In addition, their reflection reports after completing the task were analysed. The corpus of videos (Figure 1) consists of 17 video recordings from the UB trainees and 35 replies from the HI students.

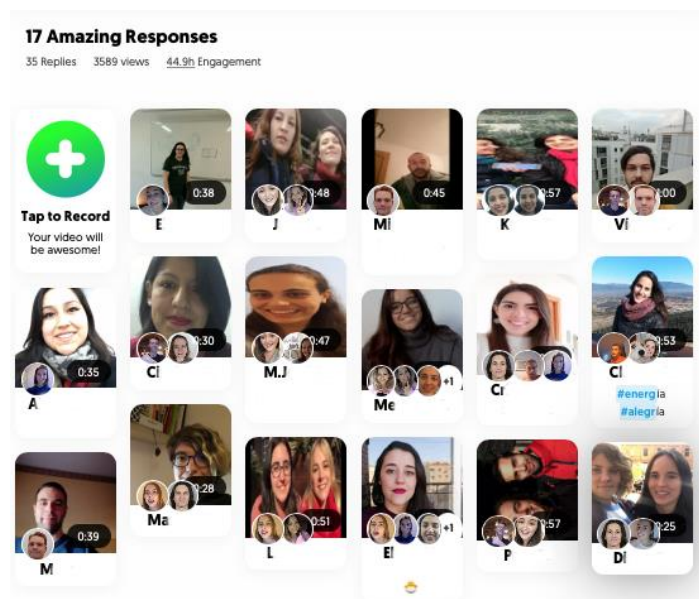


Figure 1: Video grid of the students' first task on Flipgrid

The group of students from the University of Iceland followed the course "Conversation II" but studied in different BA or BS and master's programs. Their language level could be described as B1-B2 according to The Common European Framework of Reference for Languages (2001). The group of trainee teachers from the UB were enrolled in the course *ICT for Spanish teaching* and had no previous experience in either online teaching or telecollaboration. Both groups' demographics are summarized in Table 1 below.

Table 1. Demographics of both groups of students

	HI	UB
Number of students	11	22
Gender	8 females - 3 males	17 females - 5 males
Origin	5 Icelandic, 1 Albanian/Icelandic, 1 Lithuanian/Icelandic, 1 French, 1 Russian, 1 Norwegian, 1 USA	17 Spanish, 2 Peruvian, 1 Argentinian, 1 German, 1 French
Age	Ranges from 21 to 45	Ranges from 20 to 28

A qualitative approach of analysis of the videos by the Spanish trainees and the emotional video reactions from the Icelandic students was carried out identifying three types of strategies: technical, communicative and affective. These data were contrasted with both students' and trainees' reflections on the experience of their first interactions.

Results

The three types of strategies students applied are presented first. Then, UB students' perceptions about their video performances, and, finally, data obtained from both groups' reflections about their first encounters are described.

Technical strategies

After analysing all the videos, we realized that most of UB students intentionally chose the location to record their videos, although only few of them used it explicitly as a meaningful resource of providing personal information. Regarding the background, HI students did not realize how much information about them could be expressed by choosing the background more carefully. In general, HI students did not pay special attention to technical strategies such as lighting and framing.

The selection of backgrounds for both groups also determined the lighting used in the videos, which means that students who decided to use exterior backgrounds were also well lit, whereas those who ended up recording themselves inside (two students from Barcelona and one from Iceland) had problems with too little light on their faces.

Also, regarding the way the students framed their videos, we need to mention that half of them used a portrait orientation without taking into account that the landscape mode would have been more suitable. Only three of them did not use a static shot, and instead recorded their videos while they were walking, and most of them used medium shots.

Communicative strategies

We observed that even though there was no explicit teaching included for any of the groups about how to use Flipgrid, the vast majority did not explore the application features by themselves nor go beyond including a profile picture. They failed to use hashtags, likes or emojis to decorate their name or add any additional features to their profile pictures. Moreover, the body language, use of gestures and visual support were more obvious among the students from Barcelona, mainly because of their role as future teachers, but this could also be related to a cultural difference in how to display emotions. Nearly all the students from UB smiled openly and tried to send a positive and happy message. We also noticed that the trainee teachers could have paid more attention to their voice tones, since some of them talked too fast, using a monotonous intonation without emphasizing any particular words.

The verbal communicative strategies had the same goal for all of the students: to foster propinquity, create social closeness and look for common ground. Therefore, discourse intensifiers, invitations to visit their respective countries and linguistic structures to express willingness to participate in the telecollaboration project were, for example, used by most of the participants.

Affective strategies

Many UB students chose meaningful backgrounds such as university campuses, classrooms or their own bedrooms but only four of them actually used those spaces for any kind of self-disclosure. Some of them meaningfully showed personal objects such as pets, travel souvenirs or jewellery.

Probably the most salient affective strategy for UB students was smiling. Only three students remained serious while recording, a feature that was clearly recognized by all three researchers. Humour is considered an affective strategy but none of the 22 students seems to have used it.

The HI students, most of whom recorded themselves in interior locations, did not use the locations as representative elements to express and tell additional things about their lives. Also, just two of them showed personal objects (a flag and a book) to express self-disclosure. As with the UB students, smiling was the most noteworthy affective strategy used and humour was not used as a strategy to generate propinquity. One possible explanation for the lack of humour is that humour is based on sociocultural factors and students might have wanted to be cautious during their first encounters and avoid sending messages that could generate misunderstandings.

How UB students evaluate their own strategies on Flipgrid

Responses on the questionnaire indicate that students believe they considered technical strategies. However, not all students made the most of the locations where they recorded their videos and the same number of vertical and horizontal formats were used regardless of the background displayed. Some students used full-body framing, meaning the objects they showed to the camera could not be seen clearly, among other problems. Therefore, they lack self-awareness about technical strategies while recording their videos and thus, some awareness tasks on these issues should be introduced before recording on Flipgrid to strengthen students' digital competence.

The communicative strategies used are evaluated in different ways. On the one hand, students reported using gestures and pitch tones that facilitate comprehension. Moreover, 12 UB students state having modified discourse to make it clearer. But in most cases speaking speed is fast and tone is monotonous. On the other hand, just one student used Flipgrid communicative affordances and only two recognized having used visual support on their videos. Despite this, this last strategy was mentioned by 12 students as their favourite strategy on peers' videos. It remains to be seen whether they adopted this strategy on their videoconferences on subsequent tasks. Moreover, there is one student who values how their classmates used persuasive strategies on their videos:

(Me han gustado... y) las estrategias que han seguido lxs compañerxs que grabaron el vídeo en pareja para decir por qué [sic] les tenían que escoger a ellxs: [(I liked) the strategies that my classmates followed recording the video in pairs to say why they had to choose them].

Finally, with regard to affective strategies there are several comments that value propinquity shown on Flipgrid videos. As an example, we have selected the following two extracts that mention proximity and self-disclosure:

El uso de dibujos y pizarras, de mostrarse muy próximos a su interlocutor a pesar de no conocerlos y similares. [(I like the) use of drawings and whiteboard, to be very close to their interlocutor despite not knowing them].

Mostrar elementos personales que los caractericen y que sean importantes para ellos [showing personal elements that characterize them and that are important to them].

In fact, all four students that left final comments on their questionnaires highlighted their satisfaction about the locations in which they chose to record their videos. The following comment indicates the importance of the location and supports the idea that backgrounds on videos should be more carefully considered:

He querido usar mi habitación porque es lo que más me representa como espacio. [I wanted to use my room since it is the space that really represents me].

Reflections on first encounters

In their portfolios UB students concentrated on reflecting upon their first video-encounters and very few included comments about their experiences using Flipgrid. Those who commented on their experience using this application mentioned the following: one person mentioned the excitement of receiving her first response to the video recording; another

student indicated that having seen her partner previous to the video-conference helped reduce the unavoidable awkwardness of meeting a student online for the first time; and, finally, one student mentioned that he felt he had a lot of things in common with his partner from the first moment he saw his video recording on Flipgrid. Therefore, these responses could indicate that having video recordings before the synchronous encounter actually helped students establish emotional links with their peers and reduce anxiety.

UB students' perceptions on first videoconference encounters

Six students explicitly mentioned their affinity with their HI partners. They mostly mentioned hobbies such as sports, traveling or learning languages. They also mentioned places they both like or similar experiences in life. Moreover, another five students mentioned a high level of motivation during their first encounters and a willingness to continue the project. For example, one student said:

¡me hubiera quedado una o dos horas más hablando con él! [I could have stayed another one or two hours talking to him!]

In one case, this motivation is not the result of affinity, but of complementary learning objectives in the telecollaboration project as we can read in the comment below:

Aunque nuestros perfiles sean diferentes, ella como alumna y yo como futura profesora de ELE, creo que esta experiencia será un aprendizaje significativo y constructivo para ambas. [Although our profiles are different, she as a student and I as a future SFL teacher, I believe that this experience will be a significant and constructive learning process for both of us.]

As expected, not all reflections were positive. One student reported having felt uncomfortable and insecure because of the teacher role he had to play. But even in this case, the student ends his reflection hoping to enjoy the next tasks.

HI students' perceptions on first videoconferences

HI students' reflections, as with most of their partners in Barcelona, did not include explicit mentions to their usage of Flipgrid. They concentrated on reflecting on their experiences with their first encounters through videoconferencing. They all shared nice feelings about how this task had a positive impact on their learning process. All of them expressed how their partners from Barcelona helped them to improve their language skills.

All of the Icelandic students shared their motivations and high expectations about the project in their reflections. Two of them were surprised by how much time they spent talking during the video-conference (it was longer than they expected) and how fast time passed by. Three students also mentioned how nervous they felt before having the first conversation and another one said that she was scared before this task as she had not used Spanish for a long time. However, these three students that exhibited anxiety and fear before the first encounters affirmed in their reflections that after talking to their UB partners those negative feelings disappeared and they felt more confident.

¡Wow, me encantó hablar con mis compañeras ! ¡Ambas son súper amables y divertidas! Antes de conocerlas en vivo estuve un poco nerviosa, ¡pero ellas fueron también! La verdad es que me fue muy bien. Con J. hablé por 2 horas y con P. 1 hora y media, y siento que soy mucho más segura cuando hablo, puedo expresarme mejor ¡Estoy muy feliz y agradecida por este curso. Solo estamos empezando y ya me ha ayudado muchísimo! [sic] [Wow, I loved talking to my partners! Both were really nice and great fun! Before meeting them, I was a little bit nervous, but they also felt that way! It all went really well. I talked to J. for two hours and to P. for one and a half, and that helped me to feel more confident when speaking in Spanish; I can express myself better. I'm very happy and feel grateful for this course. We have just started and I already feel it has helped me so much!]

Conclusion

The results show that this first contact using the video grid helped to reduce the foreign language learners' anxiety, provided a good emotional atmosphere and fostered their motivation towards the virtual exchange project. From the trainees' perspective, results also suggest that trainees felt more comfortable and prepared for the first task. They also felt they improved their awareness of effective communication strategies when faced with recording a video of themselves. Results suggest there is a connection between effective strategies and positive emotional responses. Proximity is a key factor in CMC. Both groups of students highlight factors that denote proximity and appreciate those classmates' videos that used strategies that foster nearness. However, some explicit digital competence work is needed in order to help students make the most of video recording regarding technical, communicative and affective strategies.

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Does an automated translation bot support or hinder L2 collaborative interaction? - In terms of L2 production and motivation.

Abstract

This study explores the effectiveness of an automated translation chatbot used in online interactions among English (L2) learners. Considering the advantages and challenges of mobile-based collaborative L2 learning, our study introduces an automated translation chatbot offered by LINE, one of the most popular online communication apps in Japan. As the chatbot almost simultaneously translates L1 messages into L2 ones during online interactions between peers or among a group, its users receive a substantial amount of L2 exposure. This study hypothesizes that the chatbot, which allows its users to interact in their L1, will make online interactions with English less challenging by offering various L2 comprehensive input. This, as a result, will not only help the learners' L2 output which would be hard for them to generate without using the chatbot, but also facilitate their active involvement in the interaction, leading to better L2 outcomes and higher motivation for L2 collaborative learning on their part. To verify our hypothesis, both quantitative and qualitative research are conducted for Japanese undergraduates. Vocabulary recall tests, pre and post questionnaires for collaborative learning and semi-structured interviews are carried out after the L2 interaction with the bot for a certain period of time. The findings of this study suggest that the use of online translation apps leads to successful L2 learning in terms of learning gains and motivational enhancement.

Conference paper

Introduction

Collaboration has been regarded as being useful in terms of L2 learning instruction. This comes from the perspective that it helps learners to recognize the differences from others and establish shared meanings (Sharples, 2005). Swain (2000) suggested the importance of collaborative dialogue in that language use and learning through L2 interactions in problem-solving or knowledge-building tasks will result in appropriation (Wertsch, 1988) in which L2 learners acquire the knowledge or skills from others.

Additionally, computer-mediated communication (CMC) is regarded as a useful method of L2 instruction (Ortega, 2009). This is not merely because L2 learners can communicate multi-modally with others (Kearney, Schuck, Burden, & Aubusson, 2012), but also because CMC is more likely to ensure equal participation than face-to-face interactions and facilitates collaborative learning (Nguyen, 2011), leading to deep learning and therefore successful L2 outcomes (Mondahl & Razmerita, 2014). Such computer-mediated collaborative activities also foster learner autonomy particularly when the tasks are conducted via mobile devices (e.g. Reinders, 2011; Sato, Murase, & Burden, 2015). This is because they enable prompt access to resources and feedback outside the classroom and consequently facilitate out-of-class learning, which can supplement in-class activities (Kukulska-Kulme, 2015) where a sufficient amount of collaboration might not be provided.

However, some challenges are left for mobile-based L2 collaboration. Stockwell & Hubbard (2013) pointed out that reading and writing L2 texts on small screens could be a significant obstacle to learning. Furthermore, writing L2 texts is challenging, especially for learners with limited experience of typing the alphabet in their daily use of mobile devices. As there is a difference between QWERTY and flick keyboards with which Japanese letters are typed, the difference may hinder motivation to write comments on online communication boards. Furthermore, learners' anxiety about the accuracy of their L2 output can be another problem. McCarty, Obari & Sato (2017), for example, reported that Japanese L2 learners' inactive output in an online learning community resulted mainly from their perception that their English language competence was not sufficient for their peers to understand their online posts. The hesitation to upload L2 comments most likely prevented active interaction with others, and hindered L2 learning.

This study aims to facilitate collaborative activities for successful L2 learning. These activities are made possible by using LINE, one of the most popular online messenger apps in Japan. McCarty, Obari & Sato (2017) illustrate the advantage of using LINE for academic purposes. Compared with other popular social media tools such as Facebook or Twitter, LINE has a function where a group can be created and only those invited by the group administrator can join the interaction. Those without an invitation cannot access the group. Although learners are not willing to use their private social media accounts for academic use (Stockwell & Hubbard, 2013), LINE has a clear division between academic and private use of its tools. To make participants' privacy sufficiently secure, this study used LINE Works, a business version of LINE because it includes a function that keeps participants online communication anonymous.

Automated Translation Chatbot

To tackle the challenges of computer-mediated L2 collaborative learning, this study utilizes a function of LINE: an automated translation chatbot. This chatbot is available for all LINE users and various kinds of the chatbot (e.g. Korean-Japanese, Chinese-Korean, English-Spanish) are available. It automatically generates an L2 translation of a statement posted by users. Therefore, the users can see any statement both in L1 and L2 on the screen at the same time. Figure 1 illustrates the simultaneous display of L1 and L2 posts.

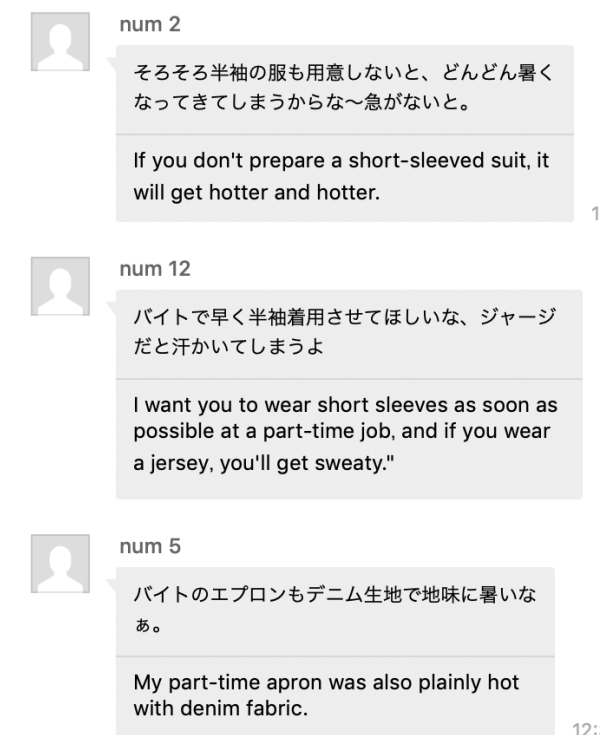


Figure 1. An example of an online interaction with the chatbot

The LINE chatbot has characteristics similar to other machine translation tools such as Google Translate, which also promptly provides translations and some studies have investigated its application in L2 activities (e.g. Garcia & Pena, 2011; Yamada, 2019). What makes the LINE chatbot different from other similar tools is that its translation function can be used during online interactions between peers or with a group, while other machine translations cannot be used during the interaction because their L2 output is not provided automatically, thus hindering interaction.

One drawback of machine translation services is that the L2 output generated is occasionally awkward or inaccurate (McCarty, Obari, & Sato, 2017; Yamada, 2019). LINE, although constantly improving, is no exception. However, the problem may be mitigated to some extent by the fact that it offers various types of L2 translation together with the L1 texts, some of which L2 learners generate themselves. In that sense, L2 learners are exposed to comprehensive input (Krashen, 1982).

In this respect, the chatbot helps learners gain a substantial amount of L2 exposure, which is understandable given that the L1 and its L2 counterpart are simultaneously displayed. In addition, the use of the bot does not make L2 learners feel inferior about their L2 competence. These advantages lead the authors of this study to hypothesize that the chatbot will, in a sense, scaffold their exposure to L2 output, which as a result will bolster L2 performance and motivation for collaborative learning.

Research

Research Questions

The advantages of the automated translation chatbot lead our study to hypothesize that it will scaffold online interactions, leading to the enhancement of L2 performance and motivation for collaborative learning. The present study investigates the following research questions:

1. Could L2 learners, doing collaborative learning with the translation bot, recall the L2 words or expressions found in the automated output?
2. Did the experience of the bot change their attitude towards collaborative tasks?

Participants

Twelve Japanese L2 learners participated in this research. They are all undergraduate students who belong to the faculty of education of a private university in Japan. Students' proficiency of English varies from false-beginners to intermediate level learners. For online interaction with LINE, the participants were gathered in one group. They had already experienced online group interactions with LINE, so they were able to post their statements on LINE talks and conduct online discussion by the time the present research started.

Research Procedures

The participants were then given a task whereby each of them posted a single Japanese sentence which follows a sentence posted by their peer, keeping in mind that the sentences as a result should make a coherent whole. The very first sentence was given by the instructor. The task lasted for a week, and they worked on another two sets of the same task with different starting sentences, meaning that it took three weeks for the tasks to be completed. After the activities, a vocabulary recall test was conducted a few days after the completion of the task to examine the retention of the vocabulary generated by the chatbot in the duration of the tasks, which they were not instructed to memorize. In developing the test, the log data of the outputs by the chatbot was collected. Then, the words that the participants were highly unlikely to know were selected for the test to minimize the possibility of their existing lexicon affecting the result. A delayed recall test was then conducted one week after the first recall test. Subsequently, follow-up interviews were administered as well as a post-questionnaire. The post-questionnaire was implemented to examine potential changes of their perspective with regard to collaborative learning. The collected data was analyzed from such angles as word recall, perception of collaborative learning, and their reflections.

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Findings

Although the current study has not found any finding yet, our previous studies using automated chatbot described some findings. McCarty, Obari, & Sato (2017) showed that the L2 sentences written by the participants using the LINE chatbot during one-month interactions became more elaborate than the sentences before the task in terms of word selection and sentence structure. They speculated that this improvement might result from the exposures to L2 output from the chatbot that the participants have not encountered before. Therefore, their improvement was prominent compared with those who conducted the interaction by writing L2 on their own without the chatbot.

In Sato, Ogura, Aota, & Burden (2018), on the other hand, the participants showed little improvement of their L2 performance in terms of vocabulary recall and elaboration of essay writing, although some expressions that they encountered during the task appeared in the post-writing, which is evidence of appropriation. Moreover, motivational enhancement was observed through a psychological scale examining belief in cooperation: "inequity" and "usefulness of cooperation" changed little, whereas "individual orientation" decreased. In addition to this, they conducted interviews after the post-tests in order to investigate the attitudinal difference between successful and non-successful participants. By analyzing their interviews we found that metacognitive skills could be a factor to make an interaction with the chatbot beneficial to L2 learning. In the interview, for example, a successful participant said, "I found it interesting that a couple of Japanese words with different connotations are translated into the same word in English." As this remark shows, one of the characteristics of successful participants is that they are working on tasks with this kind of metacognition. Based on these results as a hypothesis, the authors designed the experiment of the current study.

Conclusion & Discussion

This study aims to verify the effectiveness of an automated translation chatbot for L2 learning regarding L2 production and motivation for L2 collaborative learning. Our study is theoretically underpinned by Krashen (1982)'s input hypotheses. With the chatbot, participants were exposed to a variety of L2 sentences, some of which were comprehensible, together with the Japanese texts. This meant that the combined input each participant received may have been strengthened in terms of comprehensible input, which is necessary to develop their L2 proficiency. However, it should be noted that any generalized conclusion could not be derived from our current study due to the limited number of participants, with no control group available. Therefore, further studies should be conducted with more participants and a control group to compare differences among participants with various backgrounds.

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Emotional response language education: a first 'in-the-wild' evaluation

Bio data



John Sloan is a PhD candidate in the School of Computer Science at University College Dublin under the supervision of Professor Julie Carson-Berndsen. His research is centered on the development and testing of a personalised, e-learning platform where feedback to language learners is provided through the facial expressions of an animated avatar. His background includes teaching ESL and an MA in Linguistics from UCD in 2016.



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Julie Carson-Berndsen is a Professor in the UCD School of Computer Science where her research group has developed phonetic-feature based approaches to speech recognition and expressive speech synthesis systems. Her current research focusses on spoken language analytics using data-driven syntagmatic and paradigmatic similarities to approximate native speaker intuitions for non-native learners and virtual agents.

Abstract

This paper reports on the development and testing of Version 3 of the Emotional Response Language Education (ERLE) e-learning platform. An 'in-the-wild', heuristic user evaluation with five English as a Foreign Language students from Feng Chia University in Taiwan and one native English speaker in Ireland was performed over three months, with feedback from students informing changes and improvements. The primary goal of the study was to assess the robustness and reliability of a newly integrated speech recognition system to the ERLE platform. The feedback garnered led to the introduction of a tutorial prior to the initial class, a redesign of the buttons and presentation of the ASR output, and an animated response to loud input which causes difficulty for the ASR system. The improved system has since been implemented as a complimentary aid to a first-year English speaking and listening course at the same university in a larger, longitudinal study.

Conference paper

Introduction

ERLE is an e-learning platform which enables English language learners anywhere in the world to interact with a native speaker through the medium of an animated avatar on the erle.ucd.ie website. By employing 3D WebGL technology, the platform was developed to provide learners with an engaging and immersive virtual interaction (Sloan & Carson-Berndsen 2018). A human-like avatar displays live, native-speaker feedback primarily through change in facial expressions and gaze (see figures 1&2). This form of feedback affords the learner an opportunity to receive instant, accurate and consistent evaluation on their production while maintaining a familiar learner-teacher interaction, and has been shown to prompt language learners into reflecting on their production and altering the complexity of further utterances in response (Sloan & Carson-Berndsen 2017). The pedagogical method of providing learners with explicit, meta-linguistic information on all errors is based on both the first authors experience as an ESL teacher and numerous empirical studies demonstrating the effectiveness of this method (Li, 2010; Lyster et al., 2013). The interaction initiated after an ill-formed utterance (shown bottom-right in Figure 2), where the learner can choose to try again, ask to see what's wrong (Figure 3) or attempt another sentence follows from task-based studies demonstrating improved vocabulary and grammar retention when interaction is allowed (Gass & Veronis, 1994; Mackey, 1999)



Figure 1: Main ERLE user interface with recording and listening buttons on the right.

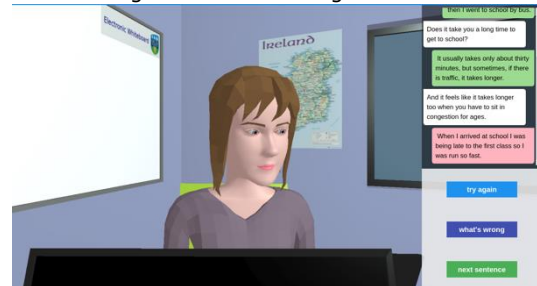


Figure 2: Expression and interaction buttons after ill-formed learner sentence

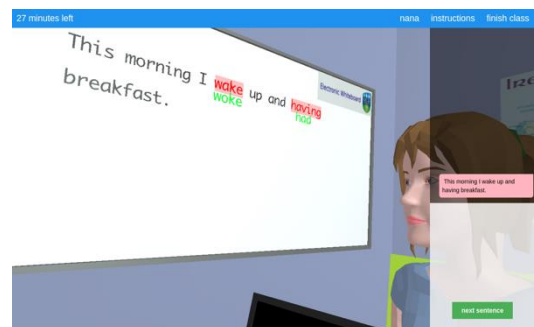


Figure 3: Error and Correction Displayed

The user interface to an application is crucial for affording the users the ability to perform the tasks for which it has been designed. This is of particular importance when providing language learners with explicit corrective feedback on language production. They are taking part in a cognitively demanding task where correction can lead to embarrassment, frustration and anxiety. Therefore, creating an easy-to-understand, highly usable interface is essential to minimise non-linguistic related errors (i.e. pressing the wrong button) which could lead to a negative experience. Two widely used forms of interface testing are user testing and heuristic evaluation. User testing usually involves scenario-based tasks, while heuristic evaluation is based on the user exploring and evaluating the interface on their own terms (Tan et. al, 2009). The major advantages of heuristic testing over user testing that it is relatively quick to implement and can be used early in the design process. Nielsen & Molich (1990) demonstrated that such a method, whereby users interact with a platform and informally give their opinion on what is good and bad about the design, identified 55-90% of usability problems on the four different interfaces they tested. This was achieved with as few as five evaluators. Jeffries et al. (1991) showed heuristic analysis could discover three times more errors than standard user testing. The success of heuristic evaluation along with its flexibility and ease of implementation made it the best choice for this study.

The interaction with the avatar on ERLE was designed with the aim of informing the learner, with the least amount of written and spoken instruction, how to use the interface. This is in line with the principle of minimising the users' cognitive load through human-centered design (Oviatt, 2006). Consideration for reducing this load is of even higher concern when the end users are intermediate-level ESL learners who are already preparing for a demanding task – speaking in English. Where possible, easy to understand signifiers (Norman, 1988), e.g. microphone and square stop symbols, were included to be understandable by users regardless of first language. The avatar is programmed to begin each class with a greeting, then ask the learner how they feel and what they would like to talk about. The learner is then instructed "Please begin when you are ready", and input buttons appear on the right-hand side (Figure 1). From this point, the learner is able to control their input and interaction with the avatar for the duration of the class – 30 minutes – after which, class automatically ends. Users are expected to be able to navigate the website, begin and maintain an interaction with the avatar using the speech recognition for the full 30 minutes. Any deviation from this is to be deemed a failure of the interface design and warrant a potential redesign.

Method

A remote heuristic user evaluation study with five EFL students from Feng Chia University in Taiwan was carried out over three months. The five evaluators were first given access to the e-learning system via the web for two weeks, where they took classes and provided feedback on their experience. This feedback was used to inform a major redesign of the interface to improve the user experience. After one month of development, the same evaluators were given access to the platform and performed another round of evaluation. This was used to locate problems and make final changes and improvements to the interface to create an easy-to-use and robust system for future users.

To gather detailed, honest user feedback which would maximise the benefit to the system, it was important to have regular and close contact with users who evaluated the platform over a number of weeks. Heuristic user evaluation requires that evaluators are free to access and interact with the interface as they see fit. The physical distance and time difference between Taiwan and Ireland (8 hours) were significant barriers to overcome in this form of study. The use of a mobile instant messaging (IM) service was necessary to allow for contact between developer and evaluators when the evaluators wished to use the platform. 'Remind', was used for the initial two weeks of testing, then 'Line' was brought in as a replacement due to teacher and student preferences.

The researcher posted initial instructions on how to log on and enter the first class in a group chat. Later, when evaluators used the ERLE platform, the researcher was concurrently in contact with the students before, during and after the class on the

messenger platform. Evaluators were invited to post messages whenever they felt something was wrong, or they were not sure what to do (see figures 6, 8 & 9). After class, the evaluators were invited to give their opinion on the class. No evaluators were required to continue doing more classes if they did not wish, as drop-out is an important indicator of engagement.

Concerns over the collection and storing of user data increased with the introduction of speech recognition to the ERLE platform. As voice recordings are potentially identifiable, it was of paramount importance that the evaluators were fully aware as to how their data is stored, and their right to obtain and delete it. As such, the information sheet and consent form for the study were presented to the evaluators in both simple English and a translation of that into their native Chinese. Each point of consent had to be individually clicked to be confirmed before the evaluators were allowed to begin participation. These included statements on the storing of all audio and text entered. All data is stored on a private, secure server which only the researchers and evaluators themselves can access.

Results

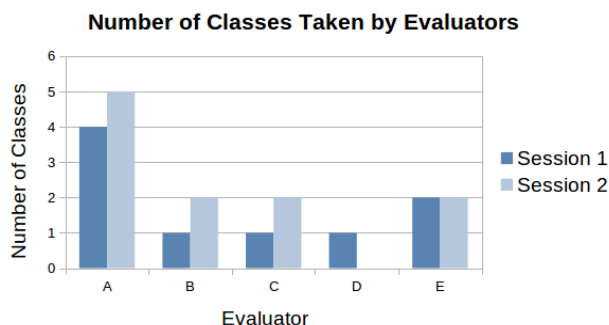


Figure 4: Graph showing classes taken by evaluators A, B, C, D & E over the two sessions

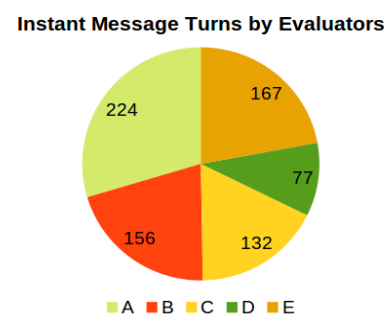


Figure 5: Chart displaying number of Instant Messenger turns completed by each evaluator over both sessions

A total of 20, 30-minute classes were taken by the five evaluators over two sessions. 9 classes were taken in the first 2-week session, the remaining 11 being completed in Session 2 after the month-long redesign (Figure 4). The total number of Instant Messaging 'turns' was 756 (One turn meaning a message or series of messages from an evaluator followed by one or more in response from the researcher, e.g. Figure 6 shows 2 turns), with 57 of those including screenshots from the evaluators (Figure 5).

Feedback from evaluators falls into two distinct categories. Queries and statements of uncertainty on how to navigate the interface and interact with the avatar were prominent in the first class. Figure 6 shows an exchange from one student which demonstrated that the minimal initial instructions were not sufficient to inform all users as to how to begin the interaction. In later classes, evaluators commented more on aspects of the interface and interaction which appeared erroneous or problematic, providing screenshots of the interface and the issue where necessary. Examples of three pieces of feedback and the changes implemented are detailed in the following section.

Feedback & Changes

Three major changes were implemented to the platform following the feedback provided from the users during the three-month testing period: a tutorial was introduced prior to the initial class; the ASR output to students and buttons for manipulating it were significantly changed; a means of dealing with background noise and loud input by using the visible physiological response of the avatar was put in place. These changes, and the conversations on messenger services which brought them about, are detailed below.

Change 1 – Tutorial

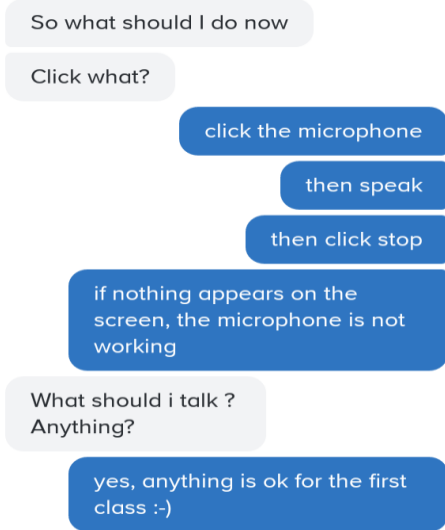


Figure 6: IM example with evaluator B

expected to proceed. This included both the topic of conversation and using the functionality of the site.

The avatar, Tia, at the beginning of a class, asks the student what they would like to talk about, and the student must choose a topic to proceed. The microphone button then appears, indicating that it should be clicked and it is the student's turn to speak. There are many reasons a user may not know how to proceed in this case, including having an insufficient English ability to fully comprehend the avatar's instructions to even simply not paying attention to the introduction. Therefore, it was decided that a short tutorial (Figure 7) which included examples and practice of the main scenarios encountered in a class would be beneficial. Each step of the tutorial must be carried out successfully before the user can enter their first real class.

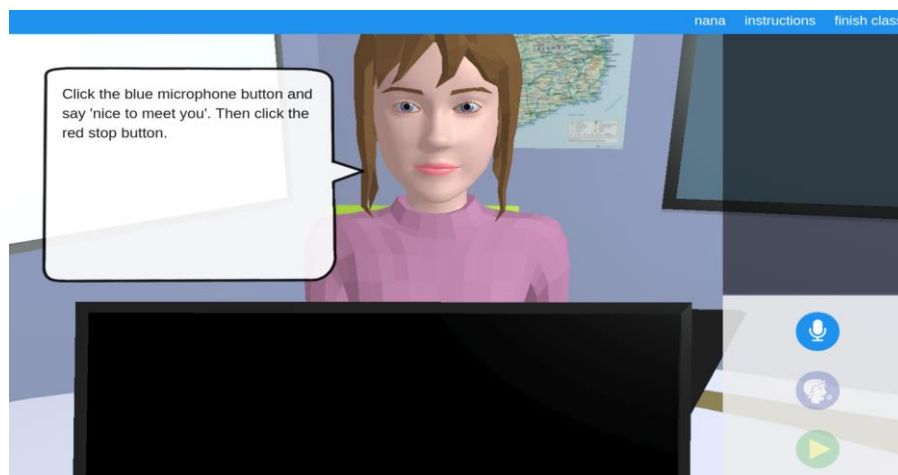


Figure 7: Example from the tutorial added in the redesign explicitly stating how to interact with the avatar via speech

Change 2 ASR Output Representation

The speech-to-text system frequently does not provide output which matches the user's intended utterance. This occurs most frequently due to non-native pronunciation, e.g. the user intends to say, "I think that...", but the ASR outputs, "I seen that...", due to the user erroneously pronouncing [θ] as [s]. However, non-target output can also be due to a number of other factors, including microphone quality and volume, background noise and

the language model underpinning the ASR not containing grammatically erroneous word sequences which non-native speakers utter.

The ASR used by ERLE is the WEB Speech API of Google's Chrome browser. Users click the microphone button, say a sentence and then click the stop button. This is transcribed to text by the ASR and displayed to the user. If the text displays the desired target output, the user may send this sentence to the avatar to receive grammatical and lexical feedback. If the ASR output is different from the user's intended utterance, then they have the option of trying to record again or typing and correcting the section which differs. Three of the evaluators made comments that demonstrated their uncertainty over the ASR output. Figure 8 shows evaluator A questioning why the output is usually different. A major problem which emerged was the evaluators growing mistrust of the ASR system as it failed to output their desired target despite repeated tries.

To solve the problem of user frustration due to repeated non-target ASR output, two changes were made during the redesign. First, a section of the new tutorial explaining why the ASR may provide different output was included. Second, it was decided to display to users up to three ASR outcomes for each spoken utterance. The user can now click through the 3 transcriptions to see what possible alternatives exist and which words and phrases are confusing the system. In Session 2, this appeared to improve the evaluators understanding of both the workings of the ASR system, and their own pronunciation errors.

Change 3 – Interference Signal

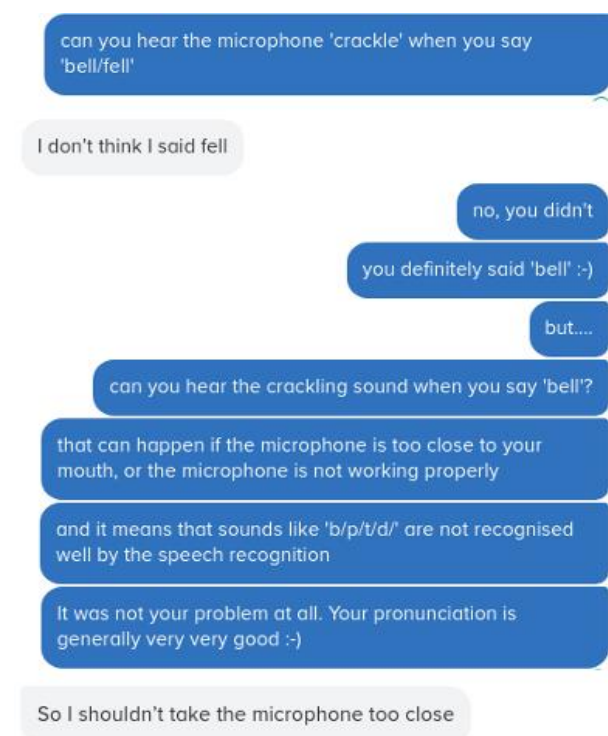


Figure 9: IM example with evaluator A - microphone proximity problem

As this is both an 'in-the-wild' and a remote heuristic user evaluation study, the researcher had no control over the conditions under which the evaluators used the platform. As a result, each evaluator had different conditions from which they provided speech input. These differences included the type of microphone being used, the proximity of the microphone to the user's mouth, the input volume and background noise.

Checks on the microphone volume and instructions to minimise background noise were included in the tutorial. However, the adverse effects of microphone proximity on the ASR output was difficult to convey to the evaluators. This is demonstrated in the IM turns shown in Figure 9. Evaluator A said "bell", but due to the close proximity of their headset microphone, the aspiration from the plosive [b] next to the microphone registered more energy. This was recognised as a fricative, which, the language model predicted as an 'f' in 'fell'. Evaluator A, upon listening to their own

recording of the attempted 'bell', could clearly hear the 'b', not 'f'. This caused confusion and a loss of trust in the ASR.

Explaining the problems associated with background noise and microphone volume to users is relatively straightforward and achievable with the tutorial. However, doing the same for problems related to individual phoneme realisations and the workings of language models is more complex. Therefore, four solutions have been put in place which improved the quality of audio recordings in Session 2. These are a visible volume bar when the user is speaking, a negative expressive reaction from the avatar when the input volume passes

an upper limit, an interference sound played back to the user, and a verbal signal from the avatar (see figure 10). These guide the users toward maintaining a minimum distance between the microphone and mouth to provide input which can be more accurately transcribed by the ASR, all while minimising the cognitive load on the user.

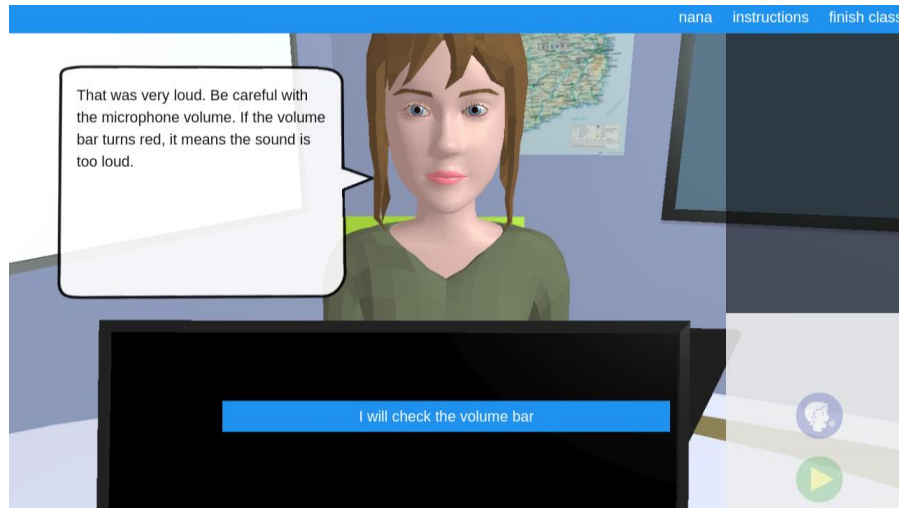


Figure 10: Example feedback from the avatar when the spoken user input is too loud

Conclusion

With 5 users, 10 hours of classes and 756 IM turns, the ERLE platform was tested, feedback gathered, a redesign implemented, and a second session of testing and feedback carried out. Following the heuristic user evaluation model proved to be successful in identifying major problems users had with the platform. It allowed the evaluators freedom to test when and how they wished, and the researcher the flexibility to make, implement and test changes rapidly. Three major changes were implemented along with a larger number of minor ones and these have improved the robustness and usability of the platform. The improved platform is now being used successfully by a larger number of students in a longitudinal study to test the effectiveness of the pedagogical method based on feedback provided through expression.

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Enhancing pupils' English vocabulary learning mediated by a learner-generated content tool from an ecological perspective

Bio data



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Abstract

Despite studies on improving young learners' language learning supported by mobile technologies both inside and outside classroom are increasing, the majority of them have focused on learners' learning for prescribed tasks. Learners hardly have room to explore how to make use of the affordances of mobile technologies on their own to support their learning.

This paper reports on a case study of examining Grade 4 students' learning experiences of linking in-class and in real life English vocabulary learning mediated by a mobile learner-generated content (m-LGC) tool from an ecological perspective, taking the vocabulary topic of "food" as an example. Premised on the concept of affordances using an ecological approach, how learners perceived and acted on the affordances of the mobile technologies in their real life to consolidate, apply, review, share and expand the vocabulary learned in class to real life was demonstrated and learners' vocabulary learning outcomes were presented.

Introduction

Despite studies on improving young learners' language learning supported by mobile technologies both inside and outside classroom are increasing, the majority of them have focused on learners' learning for prescribed tasks (e.g. Saran, Seferoglu, & Cagiltay, 2012; Wu, 2018). Learners hardly have room to explore how to make use of the affordances of mobile technologies on their own to support their learning in real life. The study explores how learners perceive and use the affordances a mobile learning tool to consolidate and apply the vocabulary they have learned in class to real life in a mobile learning environment from an ecological perspective.

Relevant literature

English as a second language (ESL) vocabulary learning

Although e-learning in English as a second language (ESL) school education is advocated in Hong Kong to create a language-rich environment for learners to use English for purposeful communication across informal and formal learning spaces (The Curriculum Development Council, 2017), several studies have revealed that in-class receptive knowledge acquisition dominates learners' vocabulary learning process which might make learners feel that reciting English vocabulary a passive and boring learning activity (Reinders, & Loewen, 2013; Zhang, et al., 2016). How to motivate ESL learners to apply English vocabulary learned in class in real life is a major concern for primary school English education.

Mobile technology supported ESL vocabulary learning

In the digital age, studies on enhancing learners' vocabulary learning using mobile devices become prevalent. Some studies have been conducted to consolidate learners' vocabulary learning using multimedia messages (MMS) (Saran et al., 2012); adopt mobile game-based learning to enhance vocabulary learning in class (e.g., Vahdat & Behbahani, 2013; Wu, 2018), improve learners' language learning outside classroom (Stockwell, 2013); and support learners' learning of idioms ubiquitously across different settings (Foomani & Hedayati, 2016).

Despite that the findings of these studies are generally positive, it is noted that, in many cases, the vocabulary learning tasks mediated by mobile apps or systems have been pre-defined by teachers, students have had little room to apply what they have learned in class to real life contexts (Song & Yang, in press). Although some studies have been conducted to investigate the effects of learning vocabulary in an authentic environment, the majority of them have been carried out in higher education (Stockwell, 2013; Uosaki et al., 2012).

The concept of affordances from an ecological perspective

To make room for learners to explore ways of making the affordances of the mobile technologies to mediate their vocabulary learning in real life, Gibsonian ecological approach to perception and action, using the concept of "affordances" is introduced. According to Gibson (1979), "Affordances" refers to the possibilities that the environment can offer for the observer for action, given that a learner has the capability to act, and exist only within the context of an observer- environment system. The concept suggests that the agent actively detects the information from the environment, and makes use of it. The ecological approach to perception and action using the concept of affordances is developed as an approach to learning. A metaphor, "person/learner as detector" of information, is coined as an alternative to how people think and learn (Young, 2013), and how we conceive of learning and teaching (Van Lier, 2004).

Moreover, affordances have social values when learners perceive the common affordances (Gibson, 1979). This concept is reinterpreted as "social affordances" to describe "the possibilities for action that people offer one another and on the role of other people in pointing out new affordances" (Still & Good, 1991, cited in Gaver, 1996, p. 3). Indeed,

perception of affordances, to some extent, is determined by the observer's culture, social setting, experience and intentions in learners' ecological niches (Song, 2013; van Lier, 2004).

The ecological approach to perception and action using the concept of affordances is adopted in this study to understand how learners think, interact and learn in their ESL vocabulary learning.

This study

Framework of affordances of mobile learner-generated-content tool in a mobile learning environment from an ecological perspective

This study aims at investigating how ESL learners as "detectors of information" or how they think and learn by making use of the affordances of the mobile technology – mobile learner-generated-content (m-LGC) tool (see detailed information about the tool in the next section.) to enhance their vocabulary learning from an ecological perspective. The role that affordances plays between learners and the mobile learning environment is shown in Figure 1 (adapted from "Affordance in Context", Van Lier, 2004, p. 96).

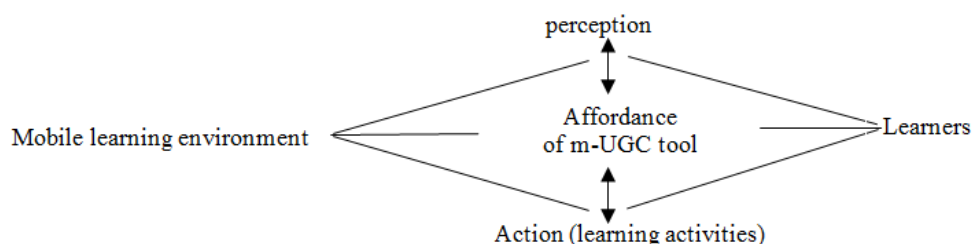


Figure 1. Framework of affordances of m-LGC tool in a mobile learning environment

Figure 1 shows that the framework of affordances of m-LGC tool in a mobile learning environment consists of five elements: learners, the mobile learning environment, learner perceptions, affordances of m-LGC tool and learning activities which are all relational. In particular, it is assumed the perceptions of learners in a mobile learning environment for specific learning activities can influence the adoption of affordances of the m-LGC tool to mediate the learning activities; on the other hand, specific learning activities in a mobile learning environment may also influence learners' perceptions of the adoption of affordances of the m-LGC tool. In this study, affordances of the m-LGC tool to mediate vocabulary learning activities are examined from an ecological perspective under this framework. The research questions to be addressed are:

Q 1. How did the learners perceive and act on the affordances of the m-LGC tool for vocabulary learning in a mobile learning environment?

Q 2. Can learners' vocabulary learning be improved by making use of the affordances of the m-LGC tool in a mobile learning environment?

The mobile learner-generated content (m-LGC) tool (refer to Song et al. in press)

The m-LGC tool is adapted from SCROLL (System for Capturing and Reminding of Learning Log) originally developed by our research collaborators from Japan (see Ogata et al., 2014). The main features of the m-LGC tool adopted in this study is a web-based platform which includes learner generated vocabulary logs (e.g., picture taking and uploading, text input, and context with GPS), and the "recall" function which could help learners to recall the learned vocabulary in class by the automatic matching with the learner created learning logs. Figure 2 shows the interface of the learner-generated content tool on the mobile device. When the learner logs in the tool, he/she can add a learning note in "Note" in terms of the English vocabulary, its translation in Chinese, and the picture of the object representing the vocabulary, which is GPS-location tagged (see Figure 3). The audio/video function is not the focus of this study. Learners could review all personalized learning logs by clicking the "My logs" button.

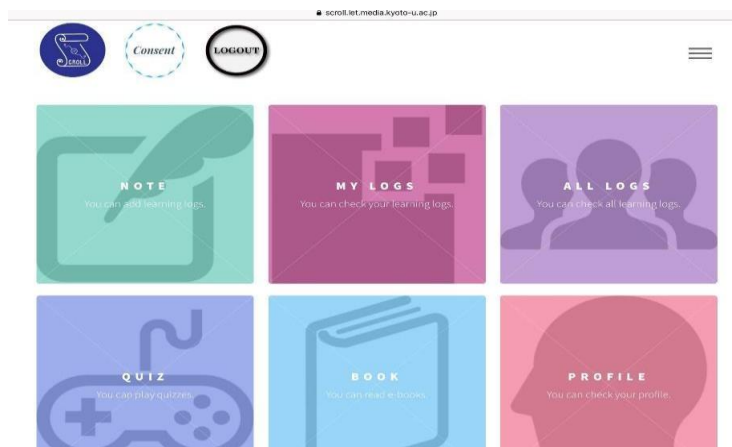


Figure 2. The interface of m-LGC tool captured on iPad

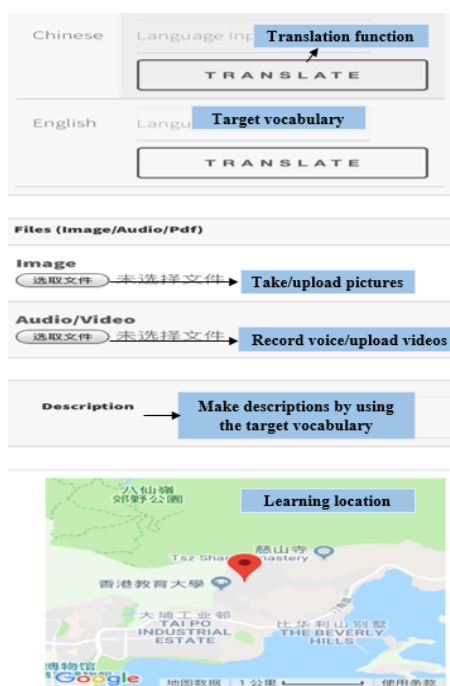


Figure 3. The main function of "Note"

In addition, the m-LGC tool offers an opportunity for learners to learn from peers by sharing learning notes and comments. Learners can not only see their own learning logs but also reflect on what peers have learned and how peers describe the words.

Case study as the research method

The ecological approach to perception and action suggests case study as an appropriate research approach (Van Lier, 2004) in order to understand learners' process of perceiving and acting on the affordances of the m-LGC tool in a mobile learning environment taking the topic of "food" with 17 new words as a example. A class with 28 students in Grade 4 participated in this one-year study.

Data collection and analysis

Data collection included students' vocabulary learning logs recorded on the m-LGC tool. In addition, pre-and post-vocabulary test with 16 questions constructed based on the curriculum was also collected. To understand the learners' performance of vocabulary learning, a control group with 27 students in Grade 4 without using the m-LGC tool in the same school and learning the same vocabulary topic was also involved in the pre- and post-vocabulary tests.

Both qualitative and quantitative data analysis methods were adopted. "Process-oriented analysis" in a natural context (Järvelä et al., 2008, p. 305) was adopted, including on-task analysis and content analysis to understand how learners perceived and acted on the affordances of the m-UGC tool to create their vocabulary learning logs and interact with their peers. In addition, some of the logs were irrelevant to the words in the vocabulary list were also analysed and categorized. The categorized data were then quantified by counting the numbers of postings and variety. Quantitative data analysis using mixed-design two-way ANOVA was adopted to analyze the vocabulary test data with the assistance of SPSS version 21. The within-subject independent variable was the repeated measures with two levels of the pre-test and the post-test. The between-subject independent variables was the m-LGC tool intervention with two levels of the case study group and control group.

Results and discussions

The results to address the two research questions are presented in this section.

Results for Q 1. How did the learners perceive and act on the affordances of the m-LGC tool for vocabulary learning in a mobile learning environment?

The learners perceived and acted on the affordances of the m-LGC tool for vocabulary learning in real life in a mobile learning environment, and generated 126 vocabulary learning logs related to the new words in the 17 vocabulary list on the topic of "Food". In addition, another 26 vocabulary learning logs were created that were beyond the vocabulary list. Moreover, learners made 56 comments on the learning logs created by peers. It was found that six types of affordances that learners perceived and acted on the affordances of the m-LGC tool for vocabulary learning, i.e., making use of the affordance of the m-LGC tool to : (1) take pictures and relate the pictures with the new words learned in class for consolidation (e.g., see Figure 4); (2) input the new words learned in class related to the pictures taken for consolidation (see Figures 4, 5, 6 and 7); (3) make descriptions of the pictures by using the new words learned in class for applying the words in context (see Figures 4, 6 and 7); (4) share and communicate with peers for social interactions (social affordance) (see Figures 6 and 7); (5) review or expand vocabulary learning bank by capturing words beyond the vocabulary list (see Figures 6 and 7); and (6) recall the words learned in class through the automatic matching with the learner created learning logs.

It was noted that the top five students made use of the affordances of the m-LGC tool and created 79 vocabulary learning logs in total (51.97 % of the entire class' postings) while 13 students generated fewer than five logs on average (Song & Yin, in press). This echoes with the view that the use of agency depends on a learning-conducive environment that allows and contributes to a diversity of manifestations of agency at different levels (Van Lier, 2010). Some interesting learning logs created by students were identified. Eight students created different learning logs about "spaghetti". One added the description in the learning log (see Figure 4): "This is a spaghetti. It's a noodle, it has cheese, tomato sauce and some meat balls and it's very yummy to eat!". It is noted that the student, by spotting "spaghetti" in real life, he made the affordances of the m-LGC tool not only to input the word "spaghetti" to consolidate what he learned in class, but also apply the word in describing the ingredients of "spaghetti". Another student also expanded his vocabulary by creating the learning log "Roti" (see Figure 5) mediated by the m-LGC tool. Some students also made use of the social affordances of the m-LGC tool by making comments on the learning logs created by peers, taking "Chicken joy" (see Figure 6) as an example. It is noted that "Chicken joy" was a newly added word stemmed from "chicken curry" in the newly learned vocabulary list. Another interesting learning log was about "cake". Although the word "cake" was not new to peers, it attracted nine comments: "This is a very yummy cake I ever see!", "Big", "This cake looks so delicious", "I like cake very much", "This cake is so big", "Yes cakes are big jerk", "I love cakes they are so yummy", "It looks so tasty", "I like cake". This indicates that the social affordance of the m-LGC tool increased peers interactions in vocabulary learning. Figure 7 shows the learning log and the first two comments.



Figure 4. Spagetti

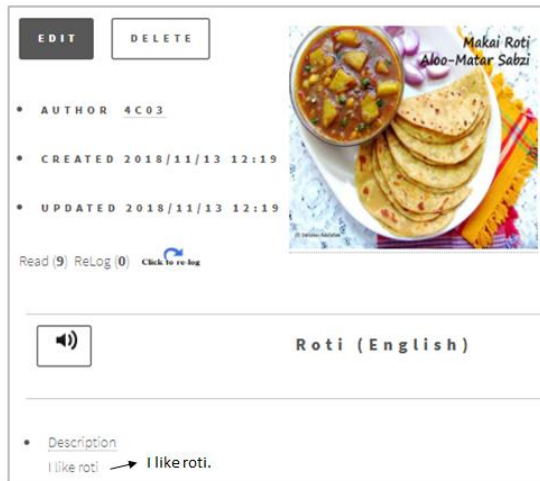


Figure 5. Roti

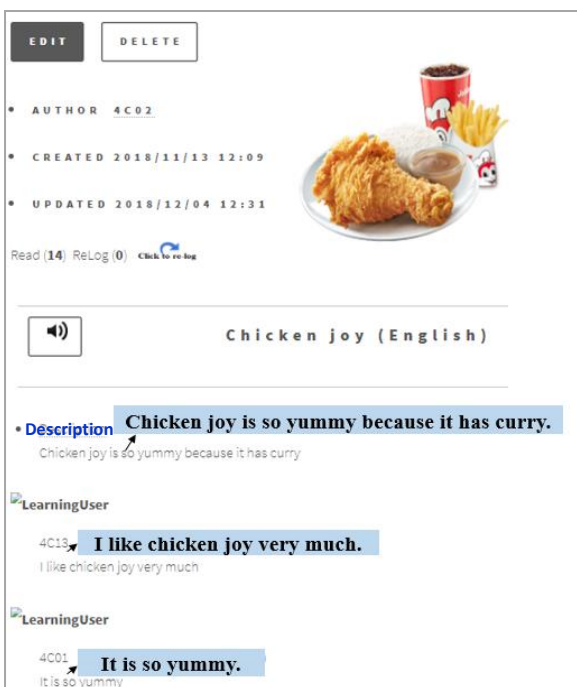


Figure 6. Chicken joy

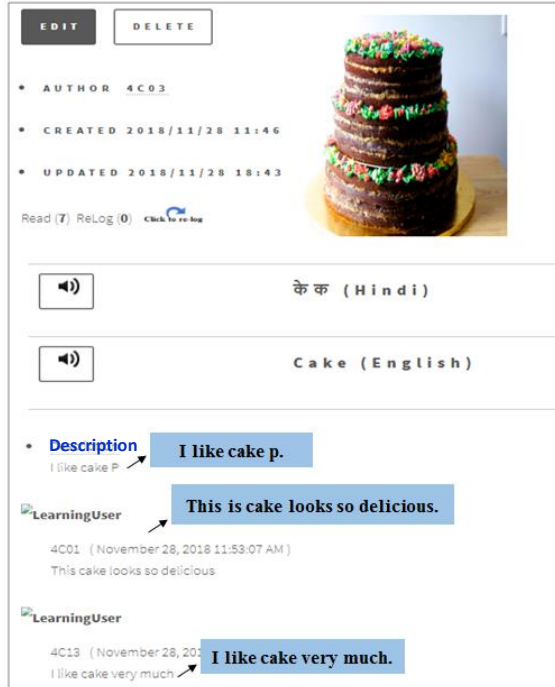


Figure 7. Cake

These learning logs demonstrate that the m-LGC tool could offer a variety of affordances for learners to consolidate, apply, review, share and expand vocabulary in real context in interesting ways in a mobile learning environment. Van Lier (2004) posits, "The affordance fuels perception and activity, and brings about meanings – further affordances and signs, and further higher-level activity as well as more differentiated perception (p. 96)". Thus, it is important for learners to detect different affordances on their own and among peers to explore unlimited possibilities in the environment for learning (Song, 2013).

Results for Q 2. Can learners' vocabulary learning be improved by making use of the affordances of the m-LGC tool in a mobile learning environment?

The results of two-way mixed design ANOVA were summarized in Table 1. Table 1 shows that neither the main effect of intervention ($F[1,43]=1.254$, $p\text{-value}=.269$, partial $\eta^2=.028$) nor the effect of repeated measures ($F[1,43]=0.063$, $p\text{-value}=.803$, partial $\eta^2=.001$) had significant difference on vocabulary scores. Yet, most importantly, the interaction between the intervention and the repeated measures was significant ($F[1,43]=9.574$, $p\text{-value}=.003$, partial $\eta^2=.182$). The effect size achieved the medal level

(>.15, Corhen, 1992). It indicates that the case study group had the change in the vocabulary scores from pre-test to post-test significantly different from the control group. The difference of the change between the two groups can be observed in Figure 8. The mean score of the case study group (N=28) improved from 4.522 (SD=2.858) in the pre-test to 6.261 (SD=4.654) in the post-test. In contrast, the control group (N=27) reduced their mean score from 4.310 (SD=3.261) in the pre-test to 4.064 (SD=3.526) in the post-test.

Table 1. ANOVA summary table for the factors of m-LGC tool intervention and the repeated measures on vocabulary Scores to the students in Grade 4.

Source	SS	df	MS	F	p-value
<i>Randomized Groups</i>					
Intervention	22.712	1	22.712	1.254	0.269
Error	778.888	43	18.114		
<i>Repeated Measure</i>					
VS	0.528	1	0.528	0.063	0.803
Intervention×VS	80.528	1	80.528	9.574**	0.003
VS×Error	361.695	43			
Total	1244.351	89			

Note. VS = vocabulary score.

** $p < .01$

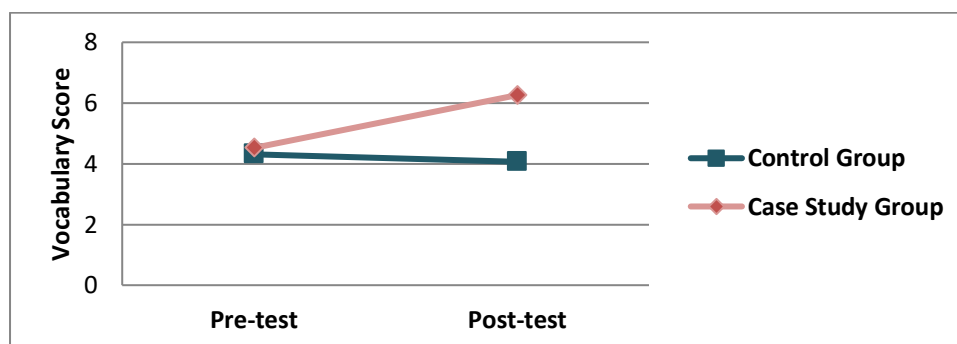


Figure 8. Mean of vocabulary scores of the case study group and control group in the pre- and post-tests.

The results show that the m-LGC tool can significantly improve learners' performance of vocabulary learning. This indicates that learners performed better if they were allowed a conducive learning environment to perceiving and acting on the affordances of m-LGC tool for their vocabulary.

Conclusion and implications

This case study, from an ecological perspective, investigated how learners perceived and acted on a variety of affordances of the m-LGC tool to link their vocabulary learning in class with real life learning experiences in a mobile learning environment. The findings indicate that learners' agency can be greatly improved in language learning if they are situated in an ecological learning environment where they can perceive and act on the affordances of mobile technologies to create artifacts and share them with their peers to support their learning. The study renders four implications. Firstly, the ecological approach using the concept of affordances in learning can help create a more conducive environments for learners to explore the possibilities offered by the tool use for their vocabulary learning. Secondly, affordances can be increased if learners' agency is motivated and employed. Thirdly, social affordances the tool use can help increase social interactions among learners in vocabulary learning. Finally, to motivate learners to learn, there must be room in a learning environment for "a variety of expressions of agency to flourish" (Van Lier, 2010, p.5). The creation of such an environment is a major task in the pedagogical design and practice in ESL vocabulary learning.

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Thinking SMALL about social media assisted language learning**Abstract**

This paper makes a case for a more appropriate acronym than CALL to reflect the reduced significance of the microprocessor in language learning and emphasize instead the most salient affordances computers bring to the process. Early CALL theorists note that the term might not transition to an era of network based learning. This paper describes such learning, and its use with language learners from the time the terms social media and Web 2.0 were coined. Since social media is an enabler of the meaningful and authentic communication so critically necessary to effective language learning, the paper encourages language practitioners to "think SMALL" and model for one another the use of social media and Web 2.0 in language learning. The paper shows how engagement in communities of practice spills over into changes in teaching practices and reports results of a survey of teacher perceptions of how effectively students and teachers are able to transition use of social media in their personal lives to their professional ones, for the purposes of both teaching and learning.

Paper

An introduction to distributed learning

Anisoara is an English teacher in Romania. Recently she was trying to recall where she could find free images online, so she decided to write to a Yahoo group she was a member of called Webheads in Action (WiA) . Over the next six days she received 8 replies with 56 link suggestions. In gratitude she wrote the list, "What a wealth of suggestions to look through! Thank you so much! You are my memory and my crowdsource, Hugs, Anisoara."

This kind of thing happens all the time in our connected world, but there are several things noteworthy about this incident. Anisoara wrote her message in March 2019 to a list populated mostly by language teachers that started in 2002. This list is one way that this community (currently 1100 members) have been interacting with each other for almost two decades. The fact that this community of practice (CoP) continues to function and help one another after so many years is itself remarkable. Another interesting detail is the way Anisoara signs off with hugs. This is a community of teaching practitioners, but informality and caring for one another are two of its salient characteristics (Bostancioglu, 2018).

Another aspect of this is that Anisoara intuits what Downes (2005) and Siemens (2006) write about how knowledge is distributed in networks, and how networks redefine what knowledge is and how it is learned. They suggest that any node in the network (e.g. Anisoara) is potentially as knowledgeable as the most knowledgeable other-node in the network. In other words, what the network "knows" is equivalent to the sum of the knowledge at all its nodes, and the wealth of networks lies in how any given node, Anisoara for example, is able to extract that knowledge, make it hers, and learn from it. Another characteristic of networks is that they overlap, so that any given node in the network is connected to dozens of other networks. The trick for a given node in a given network is to access that wider knowledge ("the pipe is more important than the content within the pipe," Siemens, 2004, n.p.), but the knowledge is potentially there, and potentially accessible, wherever it lies in the wide web of interconnected networks

An example of a SMALL distributed learning network

Webheads in Action derived in 2002 from a precursor group called Writing for Webheads (WfW). This group emerged in 1998 as a small (number of participants) community of language learners who enjoyed meeting regularly online in avatar-based spaces for the purpose of improving their command of English. They wrote about their experiences, thoughts, and feelings and sent emails along with recordings and pictures to the present author to post on a website he maintained in Web 1.0 fashion (Stevens, 2018).

WfW roughly coincided in time with the emergence of the term 'social media.' Bercovici (2010) credits Ted Leonsis with inventing the term in 1997. By the following year WfW was posting participants' photos to a wall on our portal page (see Figure 1), and attaching the thumbnails to their writings as well. This was four years before Martin Dougiamas released Moodle in 2002, and associated each posting with an image of the person posting. It would be another two years before Mark Zuckerberg would put faces to names and profiles with his social network site Facebook. Later in that same year, 2004, Tim O'Reilly and Dale Dougherty held their Media Web 2.0 Conference which popularized the term Web 2.0, coined originally by Darcy DiNucci in 1999 (Toledano, 2013; DiNucci, 1999).

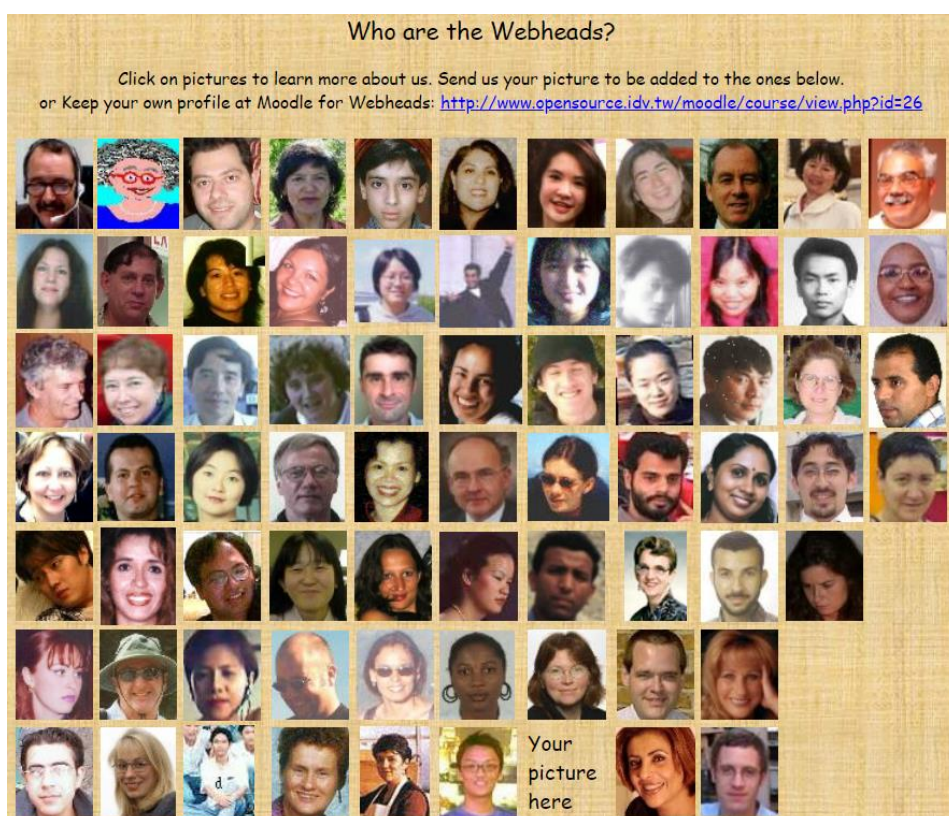


Figure 1: The Writing for Webheads students portrait gallery

WfW was premised on the assumption that language learners would improve their language not through a course of study ordained top down via a prescriptive curriculum but through motivation to interact with one another socially and set individual agendas for personal language development guided by their immediate communication needs within the social network. This is similar to what Cormier (2008) later termed 'community as curriculum', but this notion came to us intuitively and through experimentation, and in time we discovered that our approach worked and made learning fun.

WfW participants even went out of their way to meet us from a distance at online and face-to-face professional conferences and discuss with attendees how they were benefiting from their use of voice and other Web 2.0 tools in our socially connected network (albeit still

couched in a Web 1.0 portal). Accordingly we began attracting a following among language teachers who started joining the group in order to have an opportunity to interact online with language learners. Eventually the teachers predominated and displaced the students, but once the teachers were there we focused on modeling how they could use Web 2.0 with each other and thus learn to use these tools second-naturedly with students. In so doing we began to function as a social network, patterned on what had been learned with students pioneering SMALL, or social media assisted language learning.

Transition from pre-network CALL to network-based teaching and learning

In 2001 the Teachers of English to Speakers of Other Languages Computer-assisted Language Learning Interest Section (TESOL CALL-IS) launched an experiment in learning through Web 2.0 and social media. Electronic Village Online (EVO) has been an annual offering of 5-week long professional development courses given by teachers for free and for other teachers each January-February ever since.

In 2002 an EVO session was formed to help teachers understand how Web 2.0 tools had been used to create and nurture the community of learners online in WfW by enrolling them in a similar learning community. Called Webheads in Action, by its second year, participants had come to consider themselves to be a perfect example of a community of practice (Johnson, 2005; Lave and Wenger, 1991; Wenger, 1998).

Meanwhile, some practitioners of CALL at around this time were questioning the validity of their acronym. CALL is by definition computer assisted language learning, but computers are integrated into almost everything electronic. Bax (2003, 2011) argued that computers had become so normalized that the C in CALL is decreasingly descriptive, implying that a better acronym was in order. Levy and Hubbard's (2005) riposte was that we should continue to call CALL "CALL" largely as a matter of convention and practicality, but suggested that "perhaps ... the label CALL cannot ultimately make the transition from pre-network to network-based teaching and learning," (pp. 143-144).

This paper concurs with that conclusion. The purpose of language is communication, and students internalize languages through meaningful, authentic communication. Communicative skills are best honed through practice during opportunities for authentic communication which form the most stable substrate for sustained language learning.

Social media is a ubiquitous enabler of natural communication. What computers do best for language learners is to facilitate communication among themselves and with native speakers of a language, largely through social media. In reality, SM assists LL more than does the old C so over the past decade I have been encouraging people to "think SMALL" in recognition of the diminished role of computers themselves in the process of language learning vis à vis how they actually help learners acquire a target language. And for teachers to be able to facilitate this, they have to use social media in their own professional development with one another.

One modeling of this insight occurred during three global online Webheads in Action Online Convergences (WiAOC) in 2005, 2007, and 2009. In mounting these, we utilized a panoply of Web 2.0 tools, including Elluminate, to which we had been granted free access by LearningTimes.org, along with our burgeoning social networks, to organize ourselves around a Moodle portal where presenters submitted proposals which we vetted, and then facilitated for presentation over three straight days in each of those years for free to a worldwide audience. These were conferences about language teaching, involving language teaching practitioners, who in effect were modeling for one another how they could use Web 2.0 and social media in such a way that it might carry over into their teaching practices (Hunter, 2006).

Indeed, during a keynote session at WiAOC 2007 (see Figure 2), Etienne Wenger was talking with Cristina Costa about her participation in the Webheads in Action CoP, when he asked her


how she knew she was in a community of practice. She immediately answered: when she realized that her practice had changed.

WIAOC 07 keynote session:

Communities of practice in an interconnected world

New geographies of
knowledge and identity

An online conversation with Etienne Wenger, Susanne Nyrop & participants



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Figure 2: Susanne Nyrop's announcement of the keynote conversation with Etienne Wenger, retrieved from <https://www.flickr.com/photos/netopnyrop/503628210>

Stevens (2014) asserts that teachers learning through connectivist frameworks might apply similar strategies in their teaching, thus introducing their students to networked learning methods that will help them in future endeavours. Such a change in practice might materialize as a DIYLMS, or do-it-yourself learning management system. A DIYLMS is a collection of Web 2.0 tools that together function as a learning management system (LMS) in a way similar to Moodle or Blackboard, but with much greater flexibility and at minimal cost. Stevens (2012, pp.5-6) specifies what components might be included in a DIYLMS:

- A wiki portal for course information and organization, with links pertinent to course content and management, and other relevant resources, such as screencasts and tutorials
- Google Docs for student submission of assignments, and teacher feedback on student writing
- Blogging, to showcase student work
- Etherpad clones for group collaboration tasks
- Jing <<http://www.techsmith.com/jing.html>> and Screenr <<http://www.screenr.com/>> to create and annotate screen-capture and screencast tutorials
- A back-channel tool such as Twitter, Skype group chat, or Edmodo <<http://www.edmodo.com/>>
- ... synchronous learning tools
 - Skype group chat as a synchronous AND asynchronous forum
 - Google Hangout for live webcam and voice-enabled interaction

- WizIQ

Suggested in 2012, these specific tools may be dated, but the basic principles still apply; for example in place of WizIQ, educators these days might substitute Zoom as a platform for synchronous voice, webcam and text chat-enabled spaces allowing for sharing screens and documents among participants. As such tools become widely used and accepted, teachers are able to become familiar with them through practice in the course of their own professional development, thus becoming empowered to use them with students. In this way participants in networked communities

continually leverage each other's professional development, and what is modeled and practiced in transactions there is applied later in their teaching practices ... This strongly suggests that teachers must be trained not only in the use of social media, but through its use (Stevens, 2009, p.1).

Why not call CALL "SMALL"?

Many acronyms have been proposed to replace the C in CALL; e.g. MALL, TALL, TELL, etc. but it was this heavy emphasis on social media in our work with teachers which led to the proposal, at the TESOL conference in Denver, that we consider rebranding CALL as SMALL (Stevens, 2009a, slide 8) (see Figure 3).

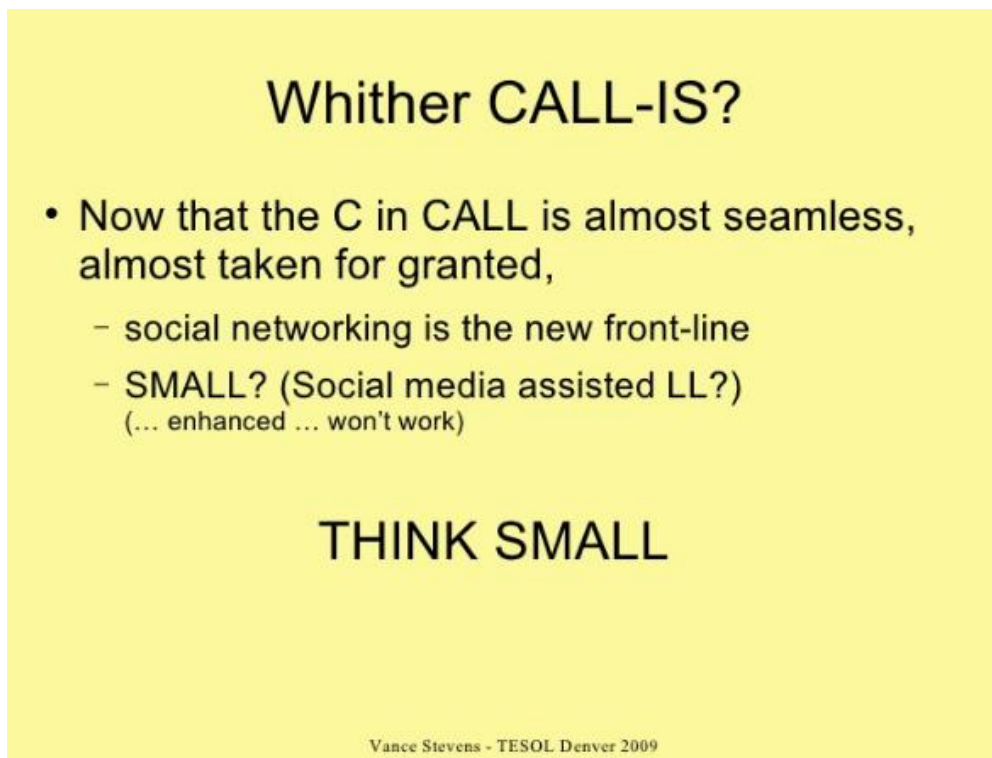


Figure 3: The first known proposal of the acronym SMALL in 2009

This appears to be the first use of SMALL to appear in the literature. A Google Scholar search on the string "social media assisted language learning" turns up no hits when filtered through 2009, and filtered through 2010 it produces one hit for Stevens (2010). Filtered through 2011 there is an additional hit on Mashinter, (2011), who cites Stevens, Cozens, and Buckingham (2010) as her source for the term.

The term SMALL was independently arrived at by Chua (2013) as a characterization of his research showing how students generally benefited in writing, speaking, grammar, and vocabulary from using wikis, YouTube, Facebook, and to a lesser extent, Twitter. But the acronym did not appear to gain much more traction until a panel was formed at the 2019

TESOL Conference in Atlanta to address the case for using social media in language learning and referred to that as SMALL.

In communications with other panelists, I felt that we were describing how social media was used in our contexts depending, as with the proverbial blind men, on which part of the elephant we happened to be touching. My own impressions of social media have been formed from decades of working with students in Arab countries where social media was sometimes restricted, sometimes banned altogether, and colleagues might not be amenable to its use. However, my impressions when I encountered colleagues from more developed parts of the world were that they and their students, especially in K-12 and to some extent higher education, were more sophisticated in their use of social media in both their teaching and their learning.

Selected survey results

I wanted to better understand how educators worldwide perceived their competence and effectiveness in using social media in language learning vis à vis that of their students. So I created a survey to establish a benchmark of educator perceptions of how SMALL is used worldwide, drawn from a range of contexts, not only from mine.

All 60 respondents to the survey reported themselves to be educators; 93% had been in the field for over 10 years. They came from 31 countries. 85% were teachers, the rest specialists working in support of teachers (Figure 4).



Figure 4: Breakdown of educator roles of those surveyed

The survey sought to establish what percentage of respondents used social media with each other for personal learning and with their students for academic purposes. Most tended to use social media with their students and in their own learning, though many did not use social media for either.

When asked about their own use of social media for learning, 74% said they used social media in learning from their peers; 19% said they didn't (Figure 5).

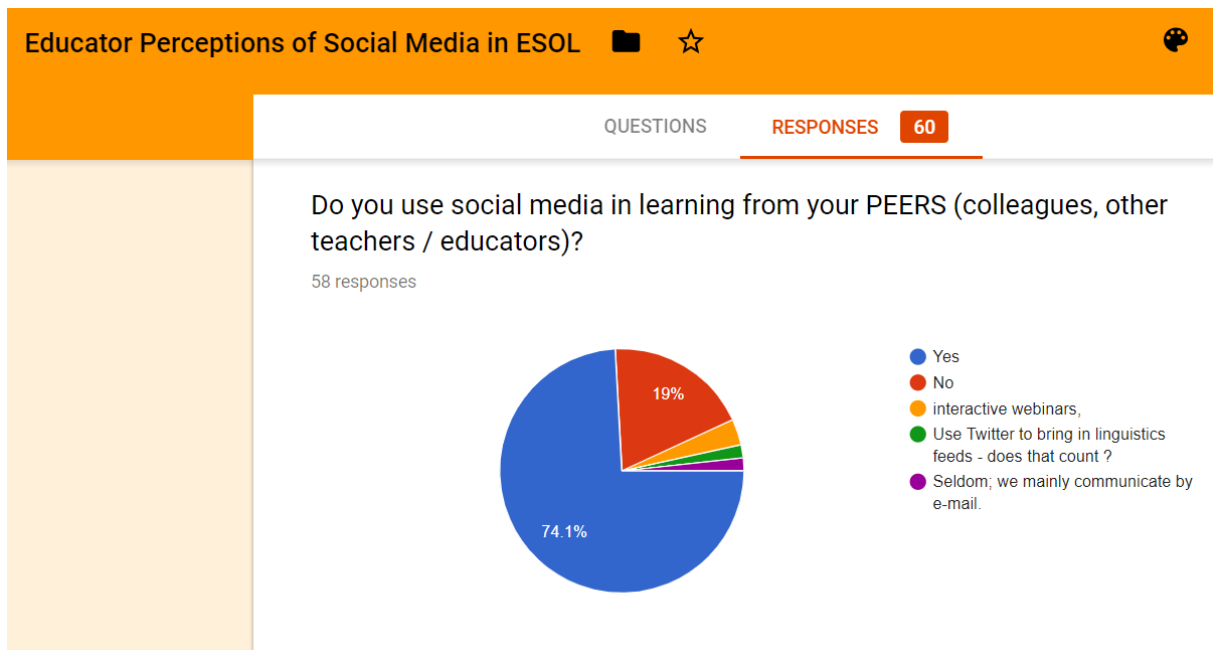


Figure 5: Extent to which respondents used social media in learning from their peers

Two thirds said they used social media with their students; almost a quarter (14 respondents) said they didn't (Figure 6).

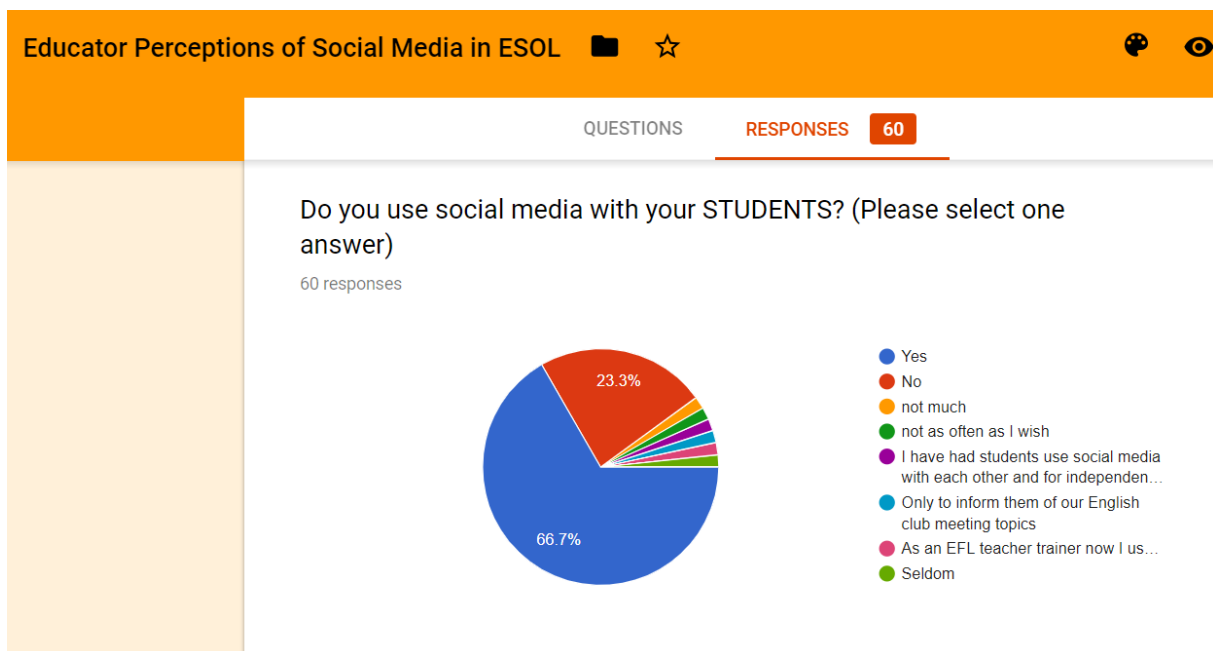


Figure 6: Extent to which respondents used social media with their students

How educators learn about social media

When asked how they had acquired their knowledge of social media, half said through reading, through trial and error, and from websites. A quarter said they had learned from YouTube videos. Almost half said they learned from peers, and a quarter said they learned from mentors / teachers (see Figure 7). Therefore, 75% of the respondents cited peers and mentors as being a prime factor in their knowledge base on social media.

Your experience with social media

My knowledge of using social media as a tool for learning comes mainly from (please select the one, two, or three most important to you from the list below)

60 responses

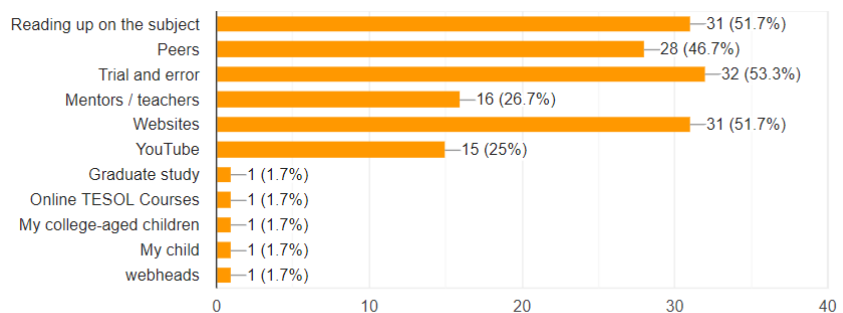


Figure 7: How respondents acquired their knowledge of social media

On the presupposition that peer scaffolding would be important to teachers in improving their skills with social media, one item in the survey asked if teachers were good models for one another on using social media effectively in their teaching and personal learning. As seen in Figure 8, teachers overwhelmingly agreed (95%) that they could be effective models for one another in this regard. The other 5% were neutral; no one disagreed.

Teachers can be effective models for their peers / colleagues regarding how to use social media effectively in their teaching and personal learning.

60 responses

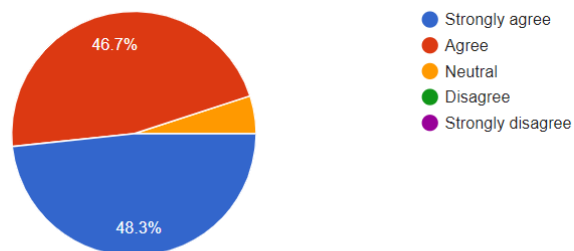


Figure 8: Appreciation of teachers modeling use of social media with one another

Respondents were slightly less sanguine when asked if students appear to be good models for one another. Over 88% agreed with the statement that students can be highly effective models for other students regarding how to use social media effectively for learning. 10% were neutral, and one respondent noted that social media can be unsafe for students from non-western countries (Figure 11).

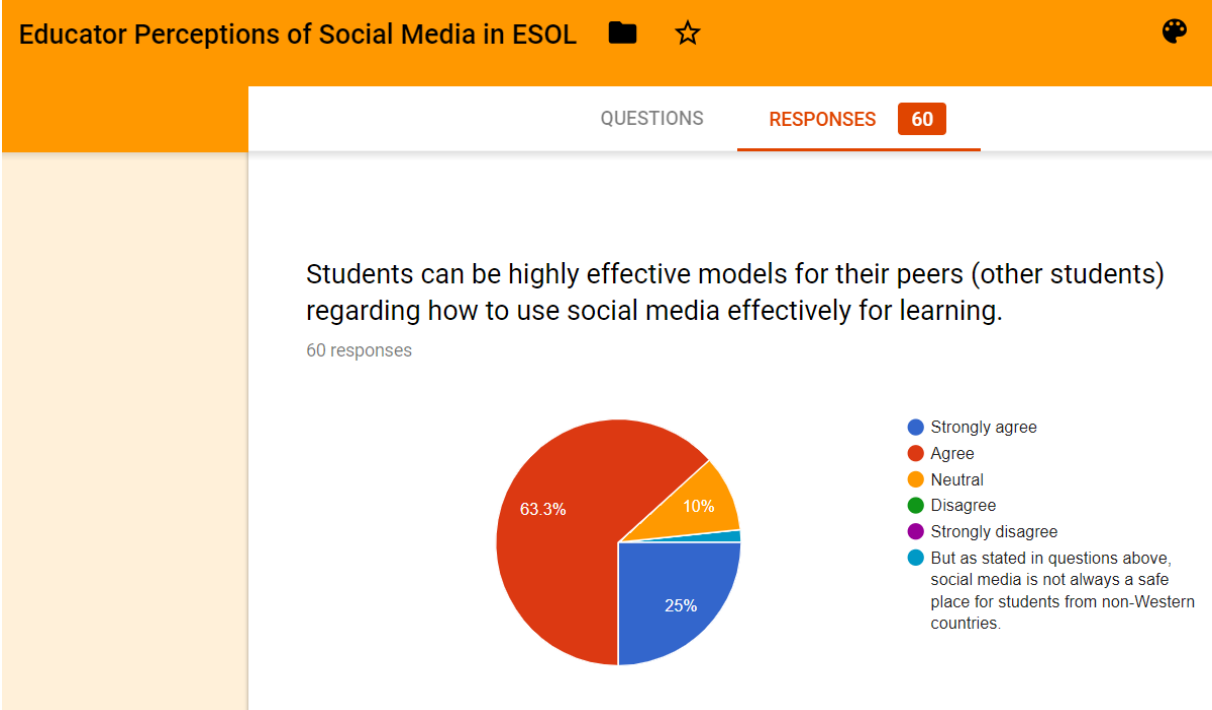


Figure 11: Extent to which students can effectively model use of social media for each other

Another item asked if the educators polled thought that teachers might also learn from observing how students used social media. 80% surveyed felt they could learn about social media from their students, with 12% appearing neutral, and only 3 respondents disagreeing. One said s/he was more net-aware than his or her students, and another expressed reservations about students from a particular country (Figure 9).



Figure 9: Appreciation of students modeling use of social media for teachers

Attitudes of educators toward using social media with students and in their own learning

The survey had items designed to shed light on the value teachers placed on using social media with students. Replies were mostly positive on the statement "Social media holds compelling potential for language learning." 85% were in agreement, 13% neutral, and one respondent said it could be, but was not worth the privacy risk (Figure 12).



Figure 12: Perception of potential of social media for language learning

One acknowledged problem of students having access to social media in the classroom is the temptation for distraction it provides. This has been an issue in my own context, and appeared to be a concern shared by survey respondents. To the statement, social media generally distracts from learning in the classroom, 22% agreed, 25% were neutral, and 47% disagreed (8% strongly), with other answers pointing out that it depends on how social media is used in class (Figure 13).

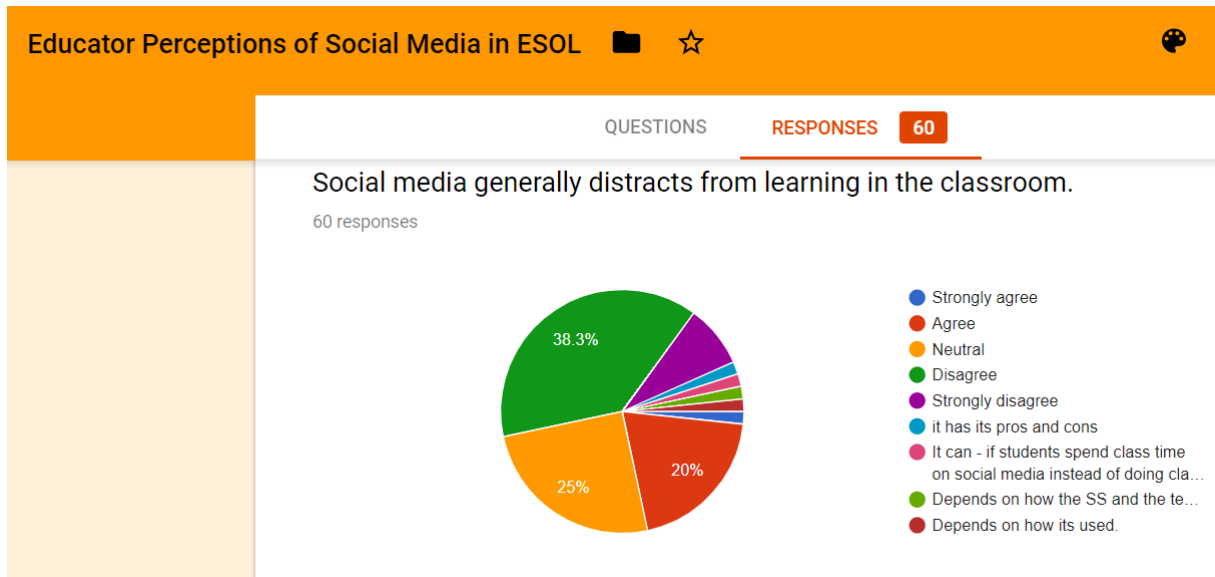


Figure 13: Extent to which social media distracts from learning in the classroom

Most of the respondents reported mostly positive experiences with social media, both in their personal learning and in working with students.

Almost 60% reported mostly positive experiences using social media with their students in their teaching, whereas on this question 20% (11 of 60, plus one who wrote 'not applicable') said they had never used social media with students in their teaching (Figure 14; c.f. Figure 6 above).

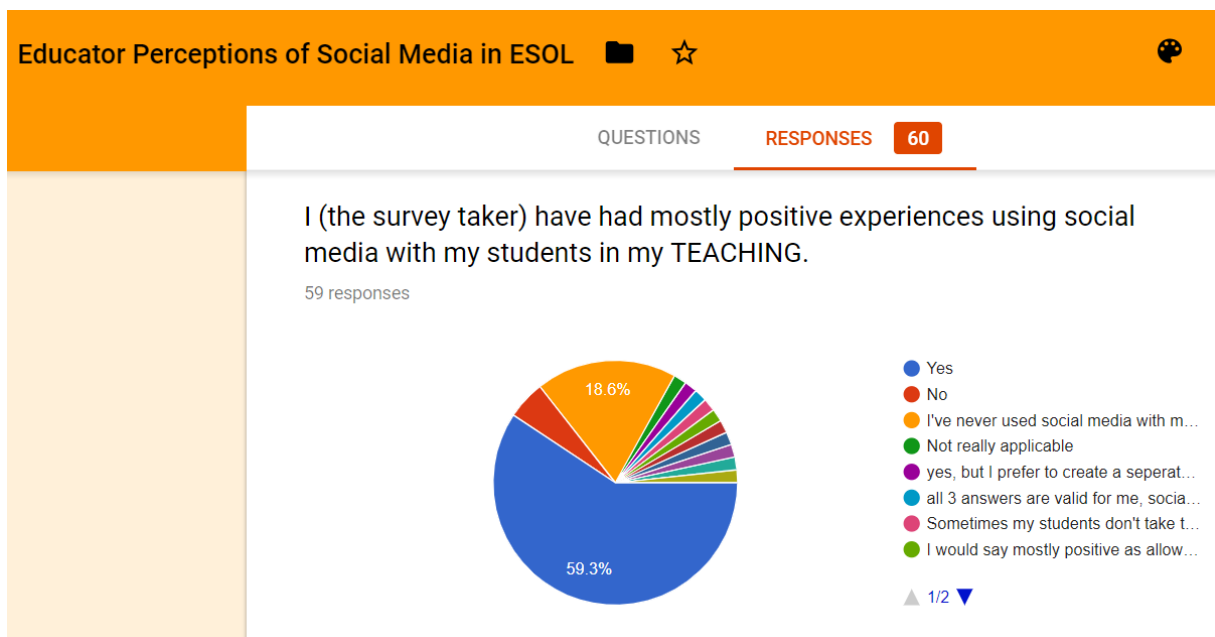


Figure 14: Respondents reporting positive experiences using social media in teaching

Of all respondents, 82% reported mostly positive experiences using social media in their own personal learning. Only three of 60 (5%) answered not having had positive experiences with social media in their own learning, and five (8.3%) said they had never used social media in their personal learning (Figure 14).

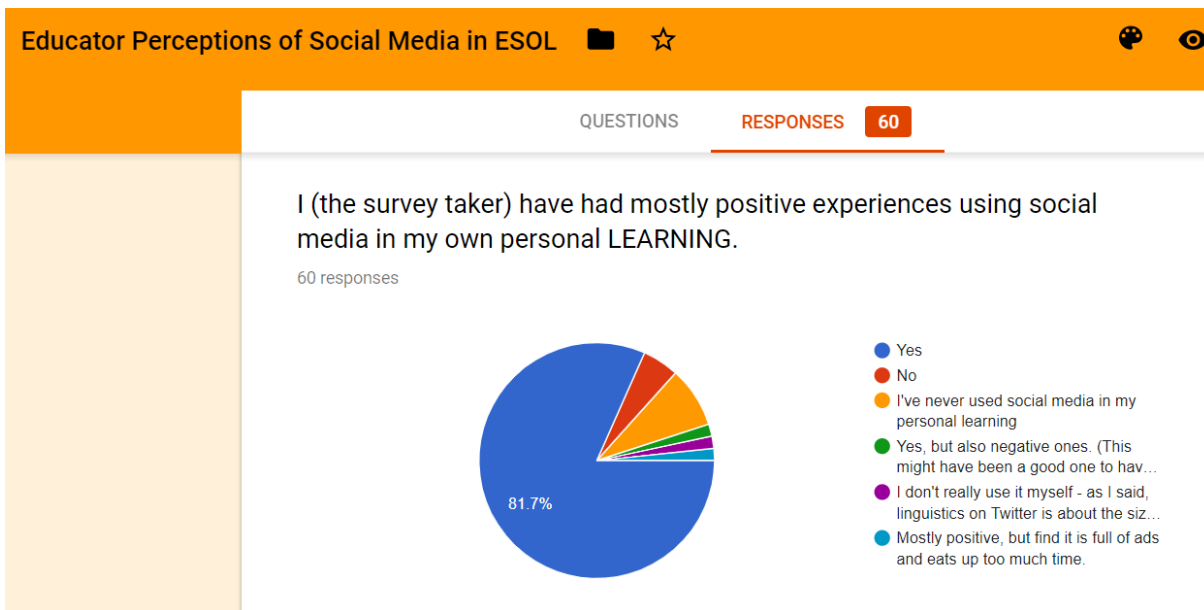


Figure 14: Respondents reporting positive experiences using social media their personal learning

Do educators think their colleagues and their students are able to use social media effectively

Regarding educators' perceptions of other teachers' use of social media, the survey asked if teachers in general might use social media themselves but not know how to use it effectively in their teaching. Surprisingly, 85% agreed (20% agreed strongly). Only 8% disagreed, and 5% (3 respondents) were neutral. So it appears that educators responding to this survey felt that many of their colleagues were familiar with social media for their own purposes, but not up to speed on its use with students (Figure 15).

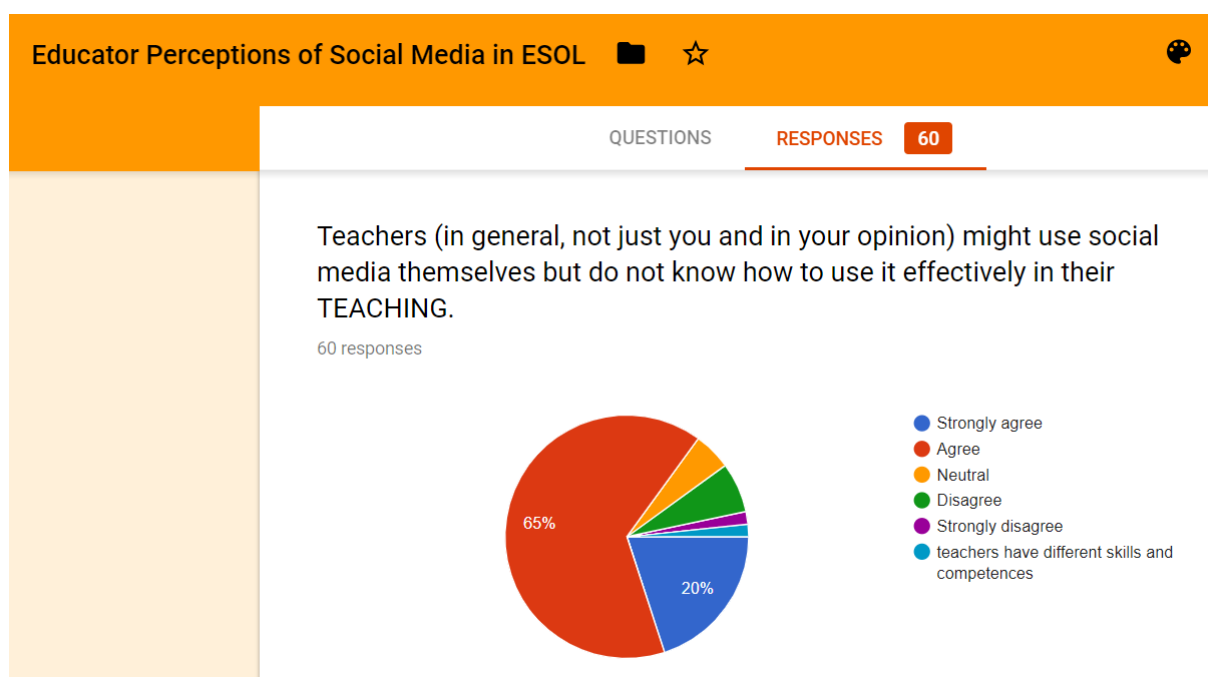


Figure 15: Perceptions of other teachers' ability to use social media effectively in their teaching

A similar question asked educators to rate the statement that students might use social media themselves but not know how to use it effectively in their learning. According to Figure 16, there was strong agreement with this (78%), 12% were neutral, and 8.3% disagreed (but none strongly).

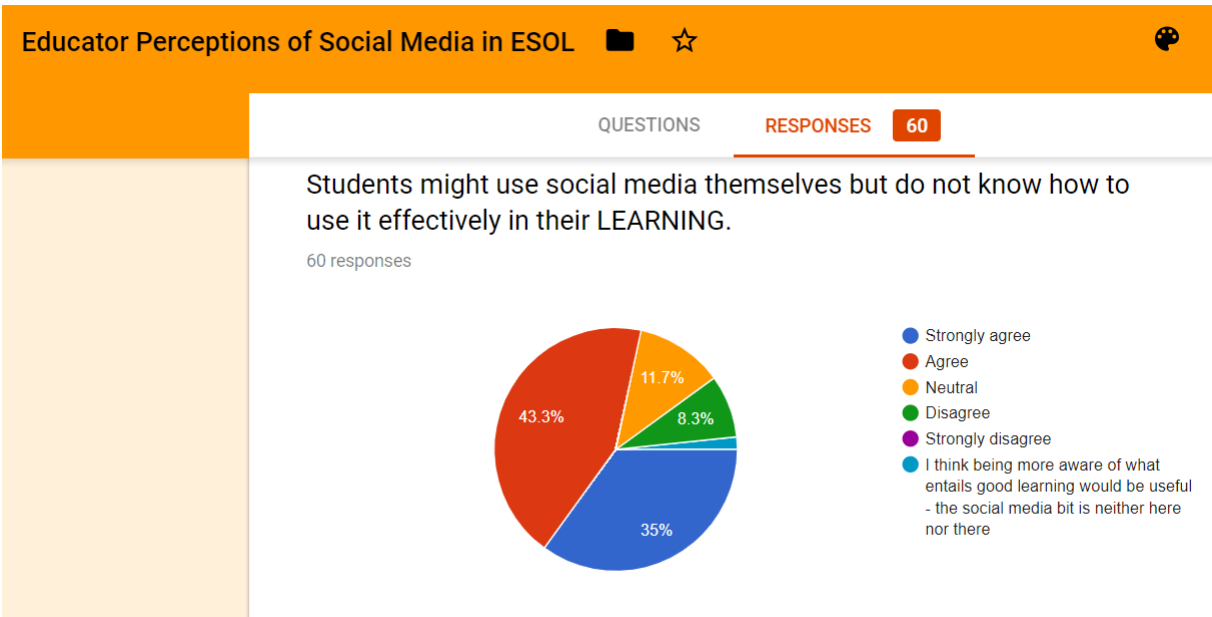


Figure 16: Perceptions of students' ability to use social media effectively in their learning

Social media found most useful in teaching and in personal learning

Respondents were asked in two places on the survey if they used social media with their peers/colleagues and if they used social media in teaching their students; and if they did, to list their favorite use(s) of social media, and if not, why not? These items elicited some of the more useful data to emerge from the survey. Respondents interpreted the question differently, some listing ways they used social media, others listing specific tools. Both response types were useful, and the reasons given for not using social media were particularly revealing.

Ways that the educators gave of using social media in their personal learning with colleagues included building relationships, class collaboration and collaboration in general, exchange of ideas, networking, online learning, professional development, reading articles, school events, sharing ideas, and tagged, categorized, and annotated resource sharing.

Some of the tools mentioned were

#ELTChat BBC Blogs bookmarking Engvid eTwinning Facebook groups feed aggregator forums	Google Docs Google+ Groups Headway Linked In MOOCs Moodle Pinterest Say again?	TED Talks threaded discussions Twitter webinars WhatsApp WhatsApp groups Wikis Zoom; online meetings
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YouTube was particularly salient in the responses; in particular for

- Lectures
- Tech channel subscriptions
- YouTube to create my own videos
- Youtube videos of ESL lessons by other teachers

When the educators did not use social media with their peers and colleagues, these were the reasons given:

1. My colleagues lack technical skill.
2. They are not very fond of using social media.
3. I avoid Facebook.
4. Facebook online book club, limited success.
5. I think most see social as social and work as work.
6. I use email with peers.

Ways that the educators gave of using social media in teaching with their students included announcements, collaboration, communications, discussion, events, group chats, peer homework, platform, projects, publishing, sharing, and songs.

Some of the social media teaching tools mentioned were

blogs Duolingo Edmodo EdPuzzle Facebook Google Google translate	Docs, PBWorks	Google+ Instagram Kahoot! Memrise Messenger TED talks	Telegram Twitter Viber Whatsapp Wikis YouTube
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For teaching, YouTube was again salient (mentioned in 10 of 60 responses). One respondent noted that Facebook was used decreasingly these days.

Again, the reasons not to use social media with students were interesting and varied:

1. Privacy laws in Italy prevent teachers using social media with students.
2. College does not allow. Used to use in past college.
3. Mostly, I'd like students to talk with each other face-to-face.
4. No need, we have other ICT like Moodle, Google+, emails.
5. I have not found a sufficiently strong pedagogical purpose for which to use it. Moodle provides enough opportunities for interaction.
6. Does not seem relevant.
7. I have enough trouble getting them into the main system where they can access the things I need to do ... have occasionally considered whether nipping round sheep dog like and trying to herd them into spaces / tasks they intend to (but don't always find time to) complete would be effective, but haven't resorted to it yet.
8. I use social media for personal, social reasons and for professional development.
 - o Students tend to use it for social, personal reasons and teachers engaging them there may intrude into their personal space.
 - o It can also blur personal/professional boundaries and appear inappropriate.

Answers 4 and 5 point out a limitation in survey data such as this. Inclusion of tools such as Moodle and Google+ in answers explaining why they don't use social media suggests that respondents don't have a common idea of what constitutes social media. Today's Wikipedia definition is "interactive computer-mediated technologies that facilitate the creation and sharing of information, ideas, career interests and other forms of expression via virtual communities and networks." By this definition, Moodle and Google+ are in fact social media.

Conclusion

Social media-facilitated collaboration in CoPs shows teachers how utilizing social media creatively with one another not only helps them model social media techniques most effective in learning from one another, but this informs the teaching practices of everyone in the participatory culture. When practices change, then novel techniques for using social media with students can develop, such as those reported in the research conducted here. As use of social media becomes normalized for language teaching, and as the computers themselves are seen as no more integral to the process of language learning than are overhead projectors, we might consider the acronym describing our field to be SMALL, or social media assisted language learning.

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Exploring adult EFL learners' engagement with oral corrective feedback in one-on-one online English tutoring

Bio data



Abstract

Oral corrective feedback (CF) plays an important role in online tutoring. Oral CF available to students and how they engage with it has a considerable impact on their learning experience and their learning outcome. This multiple-case study investigated how low-level adult learners of English as a foreign language engage with various patterns of oral CF in their online one-on-one English tutoring. The data collected through online tutoring observations points to the complexity and diversity of learners' engagement with CF on a cognitive, behavioral and affective level. In addition, how a learner's engagement level is impacted by their expectation, current English proficiency, motivation, task load and the difficulty of the online.

Key words: oral corrective feedback, engagement, one-on-one online language learning

Conference paper

Introduction

Emerging technologies are providing more opportunities for L2 learners to acquire a foreign language. One particular technological development named cloud computing has transformed L2 learning by creating a tool that makes one-on-one online tutoring with an interactive interface possible. With this new tool, a large number of online platforms provide services of interactive online foreign language teaching. A better understanding of this new form of foreign language learning is essential. Despite the fact that the effectiveness of oral CF in L2 acquisition is already a widely researched area, questions still remain as to how students engage with it on an online level and what factors influence this engagement. (Pawlak, 2014). Therefore, a key component of online learning, oral CF, will be scrutinized in order to assess its effects on learners' engagement.

As an increasing number of L2 learners turn to the online classroom, it is necessary to examine how deeply L2 students engage with oral feedback in an online setting in order to help these learners to reap the maximum benefits.

Literature Review

Ellis (2010) provides a framework for examining learner engagement with CF: from the behavioral, the cognitive, and the attitudinal perspective.

As regards to the behavioral response, the results of many researches show that recasting is the most frequently used CF type in all classroom interactions (Tsang 2004, Lyster 2010). Using observations from an advanced-level adult ESL classroom, Lee (Lee 2013) found that the most frequent type of corrective feedback was recasting which generated 92.09% of learner repairs. Nassaji (2009) also found that there are more occurrences of recasts following written and interactive tasks.

In terms of cognitive engagement, Mackey et al (2000) found that greater noticing on recasts and negotiation generates more frequent output modification. However, Yoshida (2010) reported that the occurrence of uptake does not guarantee noticing and understanding of corrective information since learners often provide a response to avoid social strain and embarrassment.

Regarding affective engagement with oral CF, Agudo, M., & de Dios, J. (2013) suggested that EFL learners emotionally respond to teachers' oral corrective feedback in different ways. The researchers such as Rassaei, E. (2015) began to explore how learners' anxiety affects CF. He found that low-anxiety learners benefited from both meta-linguistic feedback and recasts however the effect of metalinguistic feedback on their development was more profound. Conversely, the high-anxiety learners benefited from recasts significantly more than they did from metalinguistic corrective feedback.

While these studies have provided some insights into our understanding of learners' engagement with corrective feedback, no research to our knowledge has studied the multifaceted learner engagement with CF in a one-on-one online tutoring setting.

To narrow the research gap, this study used a multiple-case approach to explore how online learners' engage with a tutor's CF. It is conducted in the setting where students were observed in their natural online tutoring environment without any manipulation or intervention by the researcher. It is designed to triangulate the three facets of student engagement using a qualitative approach. It is guided by the following research question: How do Chinese adult EFL learners engage affectively, behaviorally, and cognitively with teachers' oral CF during online one-on-one tutoring?

Methods

Context and participants

Each learner was required to answer questions, read conversations and make dialogues with a tutor during a 25-minute interactive online tutorial. Each task was displayed on the screen and all topics were based on business communication.

Purposive sampling strategies were used to select learner participants. Four learners were recruited, typifying the average English L2 learner profile of low-proficiency, middle-aged and working full-time.

Data collection

The data collection lasted four weeks. The online classes were observed and video-recorded, totaling 200 minutes. Within 24 hours of each online tutorial, the learner participants attended a stimulated recall session. During these sessions learners recalled their thoughts and feeling during the online class while watching the corrective feedback episodes that occurred during the online interaction, totaling 370 minutes. The stimulated recall was conducted in each participant's first language or based on their preference.

Data analysis

First, linguistic errors in the online tutoring were identified and categorized. Secondly, according to Lyster and Ranta's (1997) taxonomy with minor adaptations, the tutor's oral CF was coded and categorized. Thirdly, the learner's immediate response to their oral CF

was coded and analyzed using the terms: repair, ignore, just acknowledged, no chance to repair and wrong repair. If there was no chance to respond due to the tutor's continuation of the conversation without a pause, it was coded as no chance. Lastly, the data collected by the stimulated recall session was coded and analyzed to explore the learners' cognitive process and attitude response.

Findings and discussion

What errors do learners make during online one-to-one tutoring sessions?

The first question is to investigate the learners' oral error patterns. All the participants made a wide range of linguistic errors during the online tutorial, with phonological errors occurring most frequently followed by lexical errors.

The data suggests that once learners noticed that the tutor was correcting their errors they felt obligated to respond to the tutor (Bao, Egi et al. 2011). Compared with classroom settings where feedback is given to the whole group, the participants are the sole interlocutor for each online tutoring thus they have a deeper compulsion to engage with what the tutor is expressing.

Table 1 Errors types from participants' 2 tutorials

	Lily	Michel	Lucy	Martin
Discourse	2	1	2	1
Grammar	10	4	5	6
Lexis	14	6	5	6
Phonology	11	13	12	12
Pragmatics	3	3	2	2
Total	40	27	26	27

What oral CF is provided by the native tutors of learners' L2 to address these errors?

The second research question focuses on the pattern of oral CF.

Table 2 Oral CF on errors

	Discourse	Grammar	Lexis	Phonology	Pragmatics
Clarification request	2	3	1	0	0
Elicitation	0	1	1	0	0
Explicit correction	2	5	10	1	4
Metalinguistic clues	0	3	13	3	2
Recast	2	6	12	26	5
Repetition	0	1	1	0	1

Recasting was most frequently offered solution to address almost all types of errors. Clarification, explicit correction and recasting are used an equal amount to address discourse errors. For phonological and lexical errors, meta-linguistic clues are the second most frequently adopted oral CF.

How do these learners cognitively process the oral CF?

Compared with written corrective feedback, oral CF may not be as salient and thus less easily noticed. During the interaction, the learners misidentified some oral CF as tutors' confirmation, clarification to what they had said or as another question not related to the errors.

As Michel stated: *The online tutorial is quite interactive. Frankly speaking, I didn't notice that the tutor corrected me often, but confirmed or questioned what I had said often.*

Moreover, although they tried to retrieve the meta-linguistic rule to self-correct the errors, they often failed to grasp the correct rule to do this effectively. The learners also conducted the cognitive strategies of conceptualizing in order to learn the words and memorizing in order to process and respond to the oral CF. If they failed to do so, they tried to skip or ignore the errors and continue the interaction.

How do these learners respond to the errors following the tutor's oral CF?

Table 3 Participants' response to oral CF

	Correct repair	Ignore	Just acknowledge	No chance to repair	Wrong repair
Clarification request	2	1	0	0	0
Elicitation	1	0	0	0	0
Explicit correction	12	0	4	2	1
Metalinguistic clues	13	1	5	1	1
Recast	27	6	12	1	4
Repetition	1	0	1	0	0

The data in this study is consistent with the findings of Lee (2013) in that the most frequently used oral CF recasting can generate the immediate correct repair but this recasting can easily be ignored or misunderstood by learners. The data also revealed that learners felt they did not always have to chance to repair their errors after the tutors' oral CF. This revelation is less documented in the previous studies. The learners thought this was as a result of limited task time or overall lesson time for each tutoring or that it was due to the tutors' beliefs of the importance of the error.

Many phonological errors corrected by recasting during the lesson were still mispronounced after the lesson. As Lucy stated: *I could follow the teachers' correction on phonology, I could do it based on my short term memory just like imitation, but since I am not familiar with the words, I still could not pronounce the corrected word in the right way. I need to write it down and practice it more after the tutorial to make it right.*

This result corroborates the ideas of Pawlak (2014) who claimed that the learners might manage to perform self-correction, but it was only thoughtless parroting.

What are learners attitude towards the online oral CF?

Although sometimes the learners felt confused when they do not understand the oral CF, they are positive to oral CF from the case study overall. It is worth noticing that the attitude is also subject to the learners' current level of English proficiency, expectation or motivation and the task difficulty of online learning.

Martin: Since my goal is to communicate with foreigners, I do not care too much about pronunciation accuracy. I think some errors do not interfere with our communication.

Peer embarrassment can be an enormous communicative restraint in a regular classroom setting as learners fear embarrassment in front of the peers. The learners in this study commented that the lack of peers allowed them to feel less embarrassed when having their errors corrected during their online tutorial than in the regular classroom.

This attitude varied with depending on the amount of online learning experience. One learner, Lily, was initially upset upon the receipt of oral CF. She commented that she felt as if she was being interrupted and insulted by the tutors' oral CF in the beginning of the tutorial but later she successfully converted this into a positive emotion regarding the same oral CF as help from the tutors.

In this case, it can be suggested that learners require guidance regarding CF before they commence tutoring on an online platform in order to benefit learners more and to steer them through the initial stages if they feel uncomfortable.

Conclusion

This study has explored the differences between oral CF in an educational settings and the traditional classroom setting. It has found that phonological, lexical errors are most

frequently addressed by recasting followed by meta-linguistic clues. Although recasting provoked an immediate behavioral response in the learner, the effectiveness of recasting can be brought into question due to the fact that phonological errors still could not be addressed by learners themselves after the lesson. It can be proposed that these tutorials alone do not deliver enough phonological practice and extra offline practice is required to correct these errors. To combat the influence of a learners' current English proficiency, expectation, motivation and the task difficulty of online learning on their online classroom engagement level, it is important that learners' complete a survey on their backgrounds and needs prior to their language learning sessions. In order to facilitate a deeper engagement with oral CF on an online learning platform, it is essential that guidance on this is provided before the tutoring sessions commence.

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Imitating American TV dramas in the Online exam-oriented English language preparation class

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Abstract

This study aims to investigate the effects of imitating American TV dramas in the exam-oriented context as practices after receiving online International English Language Test System (IELTS) preparation instruction on second language pronunciation. The participants were 24 Chinese IELTS candidates who got 5.5 in previous IELTS speaking test and would retake the IELTS test again before December 2018. They were divided into 2 groups (Control Group and Experimental Group). Fourteen of them were in the Experimental Group. The others were in the Control Group. They attended an online IELTS preparation course which lasted for 8 days through an online teaching platform, Tecent Ke, and did practice every day during the course session. Participants in the Experimental Group did one more task each day which is to imitate American TV dramas. This practice was done and recorded after class by themselves, and recordings were sent back to the teacher through Wechat which is a social APP, after which feedback from the teacher was given to students. Participants were asked to use the APP called 'Funny Dictionary' in which American TV dramas had been edited with subtitles to imitate. After they received a 10-hour instruction with the 8 days' practice, a post-test was conducted to evaluate the participants' oral production in English by an ex-IELTS speaking examiner. Four participants in the Experimental Group were invited to do a follow-up interview after the post-test. Results suggested that imitating American TV dramas had a significant effect on L2 learners' pronunciation of the target language. A model of applying American TV dramas imitation was set up, which is suitable in the exam-oriented context.

Conference paper

Introduction

When preparing the English proficiency test, speaking is one of the four skills and as important as the other three skills (listening, writing, and reading). Pronunciation, as one of the criteria of English proficiency test, drew language learners' attention. When acquiring productive skills, receptive skills play an important role and represent the basics of some categories of active skills (Golkova & Hubackova, 2014). A listening task is always assigned before a speaking task when teaching a new language because if learners have an imperfect perceptual ability, it would be hard for them to produce the sound (Ioup, 2008).

In second language acquisition (SLA), imitation in the class has become an important part of second language habit formation (Brown, 2007). Through repetitive practice and imitation, language learners can acquire language skills (Vygotsky, 1986, p.188).

According to the band descriptor of the International English Language Testing System (IELTS), achieving native-like is the main goal for candidates (Appendix 1.). To achieve this goal, learners need to be given authentic language materials. In addition, the topics in IELTS speaking test are related to daily life, for example, season, park, hometown, and so on (IELTS, 2007). TV dramas can fulfil these requirements. Also, using videos in language teaching is effective and can motivate language learners compared with using paper books (Pisarenko, 2017; Shepley et. al, 2016). This is the reason that TV dramas had been selected as the materials for language learners to imitate.

Computer-Assisted Language Learning (CALL) has become more popular in the Chinese context. Chinese language learners, especially those who live in less developed areas, choose computer- or mobile-assisted learning because they can get access to more educational resources, for example, lectures given by experts, online lessons, and so on. In addition, using the computer- or mobile-assisted learning is time-saving and money-saving. Even though the language learners are the people who are busy in the daytime or those who cannot afford to join face-to-face training, CALL programs provide them with chances and resources to learn. Language learning, especially vocabulary learning started to be integrated into CALL programs since 1908s and CALL programs are effective and efficient in language learning (Ma & Kelly, 2006). However, pronunciation learning in the CALL programs has not been touched by researchers because pronunciation teaching not only contains instruction but also giving feedback is an important part, especially for those language learners without sensitive ears and cannot distinguish the differences between sounds with similar pronunciation.

It would be of great value to determine in what ways teachers teach pronunciation in CALL programs, the purposes of this study are two-fold:

- 1) Investigate whether American TV dramas imitation helps online language learners correct mispronunciations; and
- 2) Identify American TV dramas imitation in the online exam-oriented context in China from students' points of view.

Method

Twenty four Chinese IELTS candidates in two classes were recruited as participants. All of them got 5.5 in IELTS speaking test, which means that they have mispronunciations. After being recruited, a pre-test which shares the same procedure and content with the IELTS speaking test was conducted and rated by an ex-examiner of the IELTS speaking test. The pronunciation sub-score of each participant was given, and all 24 participants received 5 in the pronunciation criterion. Based on the results of the pre-test, participants were divided into two groups (14 in the Experimental Group, 10 in the Control Group). Both groups attended a 10-hour online IELTS preparation course which lasted for 8 days on an online teaching platform, Tencent Ke. The two groups were instructed by the same instructor. There were 5 sessions of the course, 2 hours per session. After each session, participants in the Experimental Group imitated American TV dramas as practices. They used the APP, Funny Dictionary, and imitated the video clips edited with subtitles. After practising, participants sent recordings to the teacher through WeChat. Then, the teacher gave individual feedback to each student. After all training sessions, all participants had a post-test which is a mock exam of IELTS speaking test given by the same rater in the pre-test. However, the topics in the post-test are different from those in the pre-test. Four participants in the Experimental Group were invited to attend follow-up interviews after the post-test on a voluntary basis, which has the aim to investigate the application of TV drama imitation in exam-oriented context. The whole procedure was conducted online.

American TV Drama Imitation and Feedback

In the exam-oriented context, selecting appropriate TV dramas is a necessary part. The subtitles and the speech speed should not be too tricky and fast, for example, *The Big Bang Theory* which contains a lot of physical terminologies is not suitable for IELTS candidates. Also, learners should have watched the drama before imitating. Instead of focusing on the plot of the drama, learners should pay more attention to pronunciation features, for example, intonation, rhythm, vowels, consonants and so on. In this training, *Desperate Housewives* has been selected.

All participants in the experimental group downloaded the APP and found the drama that the instructor recommended. Learners can watch video clips with both English and Chinese subtitles, as shown in Figure 1. They can choose to hide the subtitles to practice. During the whole 8-day training session, all participants watched and imitated a video every day.

Figure 1 Screenshots of the video clip in the Funny Dictionary



All participants recorded their imitations and sent the recordings back to the instructor for feedback through WeChat. When listening to the recordings, the teacher should fill in a checklist (Appendix 1.) to record errors in each recording and send the checklist back to the participants. After receiving the feedback, participants should watch the video clips again to correct the mispronounced sounds in the checklist. The teacher should check whether the learners mispronounced the sounds again in the following practices. If they mispronounced a sound twice, the instructor connected the learner and taught him or her articulatory knowledge of the sound to correct his or her mispronunciations.

Post-test

All participants took a post-test 2 weeks after the training session. The post-test followed the procedure of the IELTS speaking test which contains 3 parts. The ex-IELTS speaking

examiner who rated the pre-test rated the post-test based on the 9 band descriptors of IELTS speaking test (Appendix 2.).

Follow-Up Interviews

Four participants in the experimental group participated the follow-up interviews on a voluntary basis. All the questions were asked to get a picture of participants' feeling and motivation about finishing the tasks.

Results

Post-test Results

An Independent sample t-test was conducted to test the post-test scores of the two groups. The results showed that the Experimental Group achieved better performance in the post-test than the Control Group ($p < 0.05$)

Table 1. Post-test Results

T-test	Mean	Observations	Std. Deviation	df	t	p
Control Group	5.85	10	0.3375	13	-2.661	0.014*
Experimental Group	6.25	14	0.3798			

$P=0.014*$ (two-tailed)

A paired-samples t-test was conducted to test the differences between participants' previous IELTS speaking scores and their post-test scores (Table 1.). The results showed that participants achieved higher speaking scores in the post-test ($M=6.18$) than the score ($M=5.5$) in the previous IELTS speaking test ($p < 0.000$)

Table 2. Test Results of the Experimental Group

Paired Samples t-test	Mean	Observations	Std. Deviation	df	p
Previous IELTS Speaking Score	5.5	14	0.0000	13	0.000**
Post-test Score	6.25	14	0.3798		

$p < .000**$ (two-tailed)

Interview Results

According to the interviews, all four participants think that the imitation task is interesting and they were motivated to do the task. Also, all participants think that the checklist is important and helpful. Extracts from each participant (P1, P2, P3, and P4) are listed below to support the above-mentioned ideas.

P1: I hadn't done tasks like this before and it's really amazing. My teacher asked me to read words or International Phonetic Alphabet (IPA), which is boring. Even though I finish my class at school at 10 p.m. every Tuesday, I still tried to finish the task and send recordings to my teacher. Her feedback is really useful. In the past, I did not realize that I mispronounced the /e/ sound. Her feedback rose my awareness about this mispronounced sound.

P2: I am a big fan of American TV drama, but in the past, I just focused on the plot. Using TV dramas as practice materials motivated me in pronunciation learning. My teacher gave me a lot of useful suggestions for intonation and rhythm. With her feedback and practice, I think I speak English more fluently.

P3: I hadn't practised English pronunciation for 8 days. In the past, I just read When studying, the first thing that I would like to do is to imitate TV dramas. It really sparked my interesting in English pronunciation. Even though the course has finished, I will continue practising. But I cannot get feedback when I practice alone. I hope that the teacher can provide us with more feedback and tell us which parts need to be further improved.

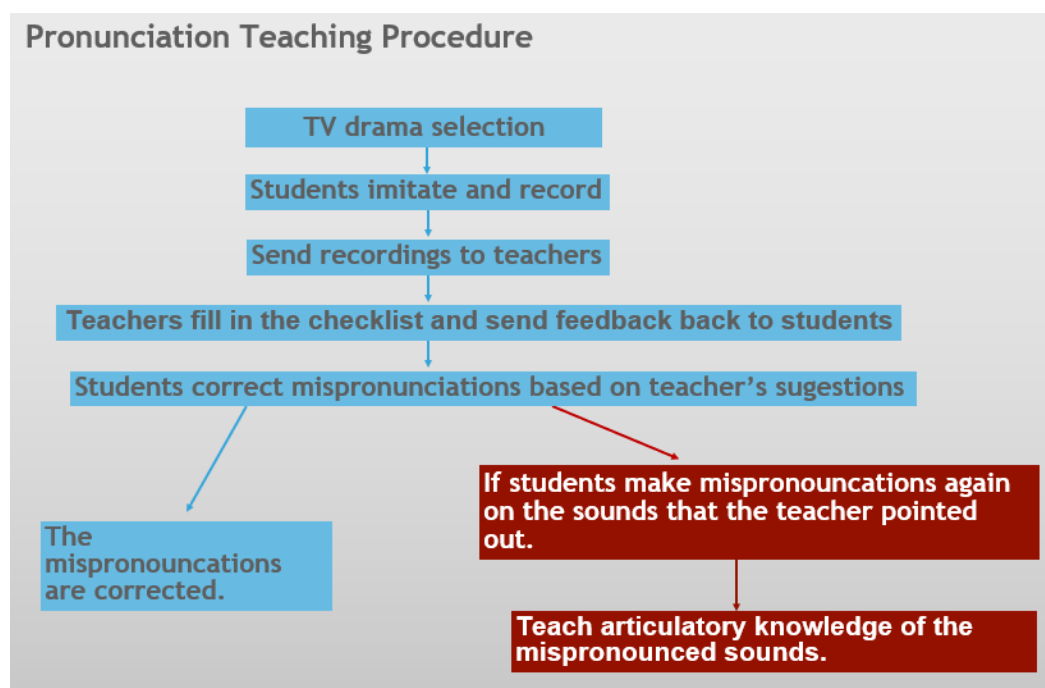
P4: Before this training, I had tried to imitate TV dramas or films, because I like this method and it is more interesting than reading words or sentences again and again. But I did not make progress in English pronunciation because my listening ability is not good and I cannot distinguish my pronunciation with the native speech. The feedback from my teacher helped me a lot. I tried to correct my mispronunciation based on the checklist.

Discussion and Conclusion

This study examined American TV dramas imitation in English proficiency test preparation classrooms in China. The pronunciation practice procedure has been identified. Learners' views of this task type were explored.

The results of the post-test and follow-up interviews indicate that the use of American TV imitation tasks in the English proficiency preparation course is effective. Also, learners stated that feedback that they received is effective and helped them to correct mispronunciations and achieve better pronunciation. Receiving feedback is an important part of second language learning (Dlaska & Krekeler, 2013; Gooch, Saito, & Lyster, 2016). A pronunciation practice model has been made based on current research (Figure 2.).

Figure 2. Pronunciation practice model



This is a pioneering study exploring how to practice pronunciation in CALL programs. However, this study only focused on participants who score 5.5 in previous IELTS speaking test. Whether this model is suitable for candidates who have higher or lower English proficiency should be further studied. It would be better if more participants whose IELTS speaking scores below 5 or over 6 can be recruited and trained. Also, which type of TV drama is more suitable for English proficiency tests candidates would be another worth investigating topic for future studies.

Appendix 2.

Checklist

Wrong pronunciation of consonant sounds

Wrong pronunciation vowels and diphthongs

Sound insertion & deletion

Wrong word stress

Inappropriate pausing

Misplacement of nuclear stress (tonic syllable)

Inappropriate use of co-articulation features (e.g. linking, elision, and/or assimilation)

Inappropriate intonation

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Computer-assisted pronunciation training through learner-made family narratives

Bio data



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Abstract

Learners who use computer-assisted pronunciation training (CAPT) programs usually practice with material that is provided by their teachers or software companies. But if the content of the material is not meaningful and relevant to them, practicing with it may not be motivating for the students. One option to help learners engage in the CAPT practice is to have them write their own material that is related to their life and culture. The purpose of this study is to help students write family narratives and use that material on the CAPT system. Two groups were included in this study: a control group (with 29 students) and an experiment group (with 28 students). The experiment group was encouraged to listen to their elder family members' storytelling and write down their narratives, which later were edited, recorded by native speakers of English, and uploaded to a CAPT system for pronunciation practice. The participants' speech performance was rated in four categories: segmental, intonation, timing (i.e., fluency) and overall performance.

Quantitative results showed that the experiment group benefited from their practice with the family narratives on the CAPT system and made significant improvement in all rating categories after the experiment. As compared with the control group, it made significant improvement especially in the category of timing. In addition, the students' family narratives were analyzed for content by using the software package Wordsmith Tools to determine story themes. The analysis result indicated that some students mentioned the hardships their elder family members (e.g., parents and grandparents) endured, such as how they survived poor financial situations by farming in small villages in Taiwan, supported their family by working hard, took care of family who were suffering from diseases (e.g., Alzheimer), or completed their higher education in difficult times. Other students revealed an affective connection they felt with elder family members during their practice reading aloud, such as the love these family members gave them, and the pride in knowing how they overcame the challenges they encountered.

In sum, practice with learner-produced family narratives for CAPT practice resulted in increased pronunciation fluency as well as affective connection between the learners and their elder family.

Introduction

With the use of state-of-the-art technology, computer-assisted pronunciation training (CAPT) system has been reported to be effective, though there is still room for improvement in how to design the material for practice that the learners can make the best use of it. Learners who use CAPT programs usually practice with material that is provided by their teachers or software companies. Practicing with program materials that are not meaningful to them may not be motivating to students. They are more likely to engage in the CAPT practice if they have content that interests them. One approach is to have them write their own material that is related to their life, such as family stories.

Stories in pronunciation pedagogy

Texts selected for use in the classroom should be meaningful and useful in meeting learning needs and also relevant to the real-life experiences, emotions, or dreams of the learner (Hişmanoğlu, 2005). Literary genres such as short stories can help students understand and develop an interest in course content (Aufderhaar, 2004). Sage (1987) stated that "The world of short fiction both mirrors and illuminates human lives." (p. 43). Stories are also considered a medium that learners can use in social interaction to demonstrate their communication skills (Hansen, 2009).

Stories are great materials that offer a rich context for learners to develop their language skills (Breiner-Sanders, Lowe, Miles, and Swender, 2000). Because stories are composed of strings of sentences or paragraph-level discourse, Levis and Grant (2003, p. 14) state that they can be used to teach "high-priority suprasegmental feature—thought grouping, also known as chunking or phrasing." Tench (2005) further notes that monologues or dialogues in stories can be very good materials used to illustrate how intonation is pertinent to all spoken language. The participants of Aufderhaar (2004) revealed that engaging with an authentic, emotional context allowed them to feel suprasegmental features and that they considered the practice with stories helpful in improving their fluency.

Learner-centered material

The active role of the learner in language classrooms has been recognized in the teaching pedagogy of this 21st Century. With a vision for putting learners' lives and experiences at the center of curriculum, Gail Weinstein advocated the use of what students have known (e.g., their stories) as the means for learning English (reviewed and cited in Johnson, 2011). She underscored that students, equipped with a wealth of knowledge and experiences, can work with their teacher and classmates for a shared purpose, such as producing a meaningful product.

The learner-centered material, such as students' own short stories, can provide them with the opportunity to express their thoughts and ideas naturally (Adams, 2003). Instead of playing acting by reading the lines of material they are not familiar with, learners would remember their times of sadness, joy or hardship, the memory of which helps them express their emotions with their speech production in a more natural way. Moreover, the learner-based material as such can help learners feel a sense of ownership of their own learning (NG and Boucher-Yip, 2010).

Materials for L2 learners should be able to stimulate them to be emotionally involved in the content of the materials and they should also be meaningful and authentic to the learners (Tomlinson, 2010). According to Tomlinson, if the learners can feel emotion whilst exposed to language in use, it is more likely they will learn the language content from their language experience, either feeling enjoyment, sadness, feeling empathy, fear, or being amused. Materials such as stories of personal experiences may facilitate classroom interactions, motivation and positive affect for learners and help increase language skills (Essig, 2005).

However, as Nicholas, Rossiter and Abbott (2011) has noted, little research has been done on the use of learners' personal stories in L2 classrooms, although use of the stories in general has its impact upon the development of learners' language skills in learning English as a second language. It is also true of the materials used in CAPT. Hanson-Smith (2018) underscored that students can create their own study materials for CALL (Computer-Assisted Language Learning) by using easy-to-use digital tools. In a similar line, Motteram (2011) saw the possibility for students to use a variety of media such as blogs to create language-learning materials on their own.

The research questions set for this study include:

1. What is the effect of the use of learner-made stories in CAPT?
2. What are the themes of the learner-made stories?

Methodology

Subjects

57 college students around 17 years old were included in this project. They were randomly divided into three groups: one control group (hereafter referred to as the control group) with 29 students and one experiment group (referred to as the CAPT group with 28 students). These students took courses related to speech training and met for two hours a week. A pretest and a posttest were given to the two groups.

Materials

The participants' stories were the texts for their CAP learning. Wordsmith Tools was employed to analyze the content of the stories in order to determine the themes that the students wrote. During each practice, journals were given to them to write down their reflections about the practice with their own stories on the ASR system of *MyET*.

Experiment design

The purpose of this study is to examine the effect of use of family narratives the students wrote for computer-assisted pronunciation (CAP) learning. Two groups were included in this study: a control group (with 29 students) and an experiment one (with 28 students). The experiment group members were encouraged to listen to their elder family member's storytelling and write down those narratives, which later were edited, recorded by native speakers of English and then uploaded to a CAPT system for practice. The learners practiced reading the stories they wrote in the first four weeks. Then in the last four weeks of the experiment, they could also practice the stories written by the other classmates. The experiment design is illustrated in Table 1.

Table 1 A Procedure Sketch of this Project

Groups	CAPT Group N=28	Control Group N=29
	Treatment	N/A
Week 1	Pretest An introduction to the experiment	pretest
Week 2	The students wrote their own stories.	N/A
Week 3-4	The students' stories were recorded by native speakers of English and uploaded to <i>MyET</i> (a CAPT system)	
Week 6-9	Then the students listened to their story recordings and repeated after the model teachers.	
Weeks 6-13	Individual student's practice with other classmates' stories on <i>MyET</i>	N/A
Week 14	Posttest Practice evaluation	posttest
Materials	1. Students' own story writings 2. Learning logs	N/A
Data Sets	1. Audio recordings of pretest and posttest 2. Learning logs	Audio recordings of pretest and posttest

Data analysis

The recordings of the 57 participants' reading of the text of a play in the pretest and posttest were collected in order to evaluate their improvement. All the audio files collected were uploaded to a database operating behind a rating website specifically designed and developed for this study. Each audio file was rated by three raters. All the sound files were presented to the raters without revealing the names of the participants and the order of the tests (i.e., pretest or posttest). Such arrangements could prevent the raters from knowing whose production they were listening to and which productions preceded or followed the teaching treatment.

The rating system adopted in this study is similar to that of *MyET*, which categorizes the scores of a learner' production into four components: *pronunciation, intonation, timing and intensity* (i.e., loudness). Due to the fact that the recording of the participants' speech might be affected by how well their microphones worked, the scoring system this study set for the articulation rating did not include the category of *intensity*. Therefore, the rating categories of this study included four components: ***pronunciation, intonation, timing, and overall performance***. The score for ***overall*** production is added to the rating items because, according to Chen's finding (2006), the human judgment tended to be subjective and more holistic instead of being discrete.

As to the qualitative analysis, the students' reflective journal entries and the teacher's notes on students' learning behaviors will be examined. In line with suggestions by Miles and Huberman (1994), the analysis includes editing, segmenting, summarizing the data, organizing and assembling it. The "open coding" proposed by Strauss & Corbin (1990) will be used to label and code the themes found in students' statements about their learning and axial coding will also be employed to note similarities found in the first step of analysis.

Results and discussion

This section starts with the presentation of the quantitative results that demonstrated the effectiveness of the CAPT program on students' pronunciation learning. Then the qualitative results would uncover the themes that were found in the learner-produced materials, which could become references for CAPT material developers. Moreover, the difficulty the students experienced during the practice session and their attitudes toward this learner-centered approach to integrating storytelling into CAPT are presented at the end of this section. .

Quantitative results

This section first looks at the group difference between the experiment group, i.e., the CAPT group, and the control group **before the experiment**. As shown in Table 1, the control group had better performance than the experiment group in the categories of *segmental pronunciation* and *overall performance* ($P < 0.05$) **before the experiment** was conducted.

Table 1 The proficiency level in speech between the experiment group and the control one before the experiment

	Mean		Difference	95% C.I.		t	P
	Control	Experiment		Lower	Upper		
P	3.17	2.81	0.36	0.04	0.68	2.27	0.03
I	3.15	2.87	0.28	-0.02	0.58	1.85	0.07
T	3.15	2.88	0.27	-0.10	0.64	1.46	0.15
O	3.18	2.83	0.35	0.03	0.67	2.19	0.03

*Significant ($P < 0.05$)

The next investigation focuses on the group performance difference **after the experiment**. Table 2 indicates that the CAPT group outperformed the control group in all the categories ($P < 0.05$), especially the category of *timing*

Table 2. The progress the experiment groups made

	Mean		Difference	95% C.I.		t	P
	Control	Experiment		Lower	Upper		
P	0.01	0.29	-0.27	0.02	0.53	2.13	0.04*
I	0.02	0.42	-0.39	0.09	0.69	2.63	0.01*
T	-0.21	0.44	-0.65	0.31	0.98	3.88	<.01*
O	-0.07	0.36	-0.43	0.12	0.74	2.76	0.01*

*Significant ($P < 0.05$)

As shown in Table 3, the experiment group made significant progress in all the categories, especially in the category of *intonation*.

Table 3. The progress the experiment group made

	Mean			SD	t	P
	Before	After	Difference			
P	2.81	3.10	0.29	0.49	3.06	0.002*
I	2.87	3.29	0.42	0.53	4.19	<.001*
T	2.88	3.32	0.44	0.67	3.46	0.001*
O	2.83	3.19	0.36	0.62	3.04	0.003*

*Significant ($P < 0.05$)

The quantitative results showed that the experiment group benefited from their practice with the family narratives on the CAPT system. It made significant improvement in all the rating categories after the experiment, especially in the category of *timing*.

Qualitative results

Furthermore, the students' family narratives were analyzed for content using **Wordsmith Tools**, and the analysis indicated that some students mentioned the hardship their elder family (e.g., parents and grandparents) had endured. Some narratives depicted how the elder family members went through the hardships of farming in small villages in Taiwan and surviving from poor financial situation, worked hard to support their family, took care of their family who had diseases such as Alzheimer, or completed their higher education in

difficult time. Furthermore, the journals of the students in the experiment group also revealed that during their practice reading aloud the stories of their family members, they felt the love the elder family members gave to their family, and their perseverance in overcoming the challenges they faced.

In sum, practice with learner-produced family narratives for CAPT practice resulted in creating affective connection between the learners and their elder family and that there was an increase in pronunciation fluency (i.e., *timing*).

The challenges this research encountered was that it was not easy for the learners to patiently read the feedback provided by the CAPT system and that the students did not know what was expected in the journal reflections on their practice with the story they wrote, which might diminish the effectiveness of using CAPT that pronunciation practice with family narratives might bring out. The solution is that before having learners practice with their own material, a language teacher has to demonstrate to them how to make the best use of every feedback generated from the CAPT system and what journal reflections on pronunciation practice should include.

Conclusion

This research examined the impact of the student's family narratives on CAPT practice. The students were found to identify with the values and the spirit denoted in the stories told by their elder family members. The CAPT practice with family narratives written by learners resulted in creating affective connection between the learners and their elder family and a significant improvement in the category of *timing*, that is, the fluency. This study has succeeded in demonstrating how the learner-made materials could become a catalyst for facilitating the effect of CAPT practice. The learners were found to be emotionally involved because they could feel the love, the hardships, and the endurance of their elderly members while reading the narratives they wrote, which made themselves engaged with the CAP learning.

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Including learners with different needs of cross-register materials: Corpus analysis of TED talk transcripts with polysemous phrasal verbs

Bio data



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Abstract

With corpus analyses of TED talks, the study aimed to reveal their forms and meanings of English phrasal verbs, one of the most difficult lexical units for non-native learners (Liu, 2011), and provide pedagogical implications for CALL practitioners. The study analyzed 382 TED talk transcripts dated across three years, 2016, 2017, and 2018 from five major topics by examining different senses of 150 phrasal verbs (PVs) and compared them to findings in Liu and Myers' S & AW PHaVE list (data from COCA sub-corpora). Applying Antconc, we identified tokens and types of possible PVs in the TED corpus automatically. Manual reading concordance lines and double-checking PV meaning senses in context by the two authors and a third rater, we found 147 PV types (approximately 3,357 phrase tokens) in 666,426 word tokens with the other 3 types unfound in our corpus. Compared our results with the sense order and percentage of the S & AW PHaVE list, we also grouped our PVs into three divisions in each register. In the spoken part, the first group contains PVs which are significant different in both sense orders and percentages between the spoken part of S & AW list and our TED corpus (59 PVs [40.4%]); second, similar in sense order but different in percentage (63 PVs [43.1%]); third, not significantly different in either (24 PVs [16.4%]). On the contrary, in the written register, the first part accounts for 35.6% (52 PVs); the second part is 41% (60 PVs) and the third one is 23.2% (34 PVs). The result indicates that concerning the PV forms and functional meanings, the TED corpus has higher similarity with the written sub-corpora of COCA as a scripted speech genre, but it still demonstrates important features of the spoken register for ELF learners and CALL courseware designers.

Introduction

As one public speaking source, TED tasks have been very popular for learners of English as a lingua franca (ELF). Precursor corpus literature shows different difficulty levels of the lexical coverage are evident among diversified topics of TED talk transcripts. They found different difficulty levels among various topics; science TED talks were more difficult compared with talks in business, technology, or global issues. To expand our L2 vocabulary knowledge from single words to multi-word units, CALL scholars may desire to know how corpus insights from verb phrases can help designers choose appropriate pedagogical materials to meet differentiated learner needs. Phrasal verbs (PVs), a group of polysemous, high frequency lexical items, comprise an important and common component of spoken English and academic writing. Even though PVs are prevalent in English language, researchers still find them hard for ELF learners to acquire this lexical group, especially for students whose first language system is completely different from English (Liu, 2011).

Three PV corpus studies paved the way for the current project. Liu (2011) compiled a list of 150 common PVs based on his corpus analyses of BNC and COCA (*British National Corpus, Corpus of Contemporary American English*), and cross-register examination of five sub-corpora in COCA. Liu disclosed that phrasal verbs appear commonly and frequently in spoken and fiction registers, while magazine, newspaper and academic registers have fewer PV occurrences. Then, he divided those 150 PVs into three groups: 43.33% evenly distributed among different registers, 45.33% not evenly distributed and with 11.33% very unevenly distributed. Focusing on more common meaning senses of the same PV group, Garnier and Schmitt's (2015) devised their PHaVE list based on corpus analysis. The list has a total number of meaning senses of 288 and the average number of meaning senses in each of its 150 phrasal verbs is 1.92. This means one common PV may have more than one meaning. Given its corpus frequency, incidents or tokens appearing in each meaning can be different. Researchers arrange the meaning with more tokens as the major or first sense in ranking or order, followed by the other minor meaning order. For instance,

Come in:

1. Enter a situation or conversation, often by bringing STH else to the table or into play (more abstract version) (47.3%)
2. Enter a place or area (room, country, etc.) (40.3%)
3. Receive news, money, information, or some other non-concrete object (10.5%)

The verb phrase *come in* has three meanings as shown above (1, 2, 3). The first meaning sense shows the most incidents, 47.3%, compared those with sense 2 and 3.

With their S & AW PHaVE list, Liu and Myers (in press) found different senses of PVs between the spoken or written registers using COCA. Their 150 frequently used PVs (each with 2.19 meanings) can be divided into three groups: (1) significantly different in both sense order and percentage between the speaking and academic writing registers (72 PVs [48%]); (2) similar in sense order but significantly different in percentage (34 PVs [22.66%]); and (3) not significantly different in either, with most of them sharing a single meaning for at least 80% of the uses in both registers (44 PVs [29.33%]). For example, among their 150 PVs, "break up" is placed in Group 1:

(in the spoken register)

Sense 1: End or cause STH to end or fail, esp. relationships (76.8%)

Ex: Karen's marriage broke up.

Sense 2: Divide into smaller parts or component (20%)

Ex: They wanted to break up the large percentage of poor people and move them. to different places.

(in the academic writing register)

Sense 2: Divide into smaller parts or components (53.8%)

Ex: They decided to break up the tests across different times.

Sense 1: End or cause STH to end or fail, esp. relationships (45.8%)

Ex: The teacher had to break up the fight.

They suggest other registers such as public speaking data warrant future corpus research. The purpose of the current study is to respond to their suggestion and compare TED talk transcripts, a typical and popular public speaking data with the results of their S & AW PHaVE list.

The corpus study

First, we compiled our TED corpus with 382 talk transcripts. They covered topics of technology, science, design, business, and global issues, mostly issued in 2016 to 2018. Then, we applied Antconc to automatically locate potential PVs (tokens and types) for investigation. Based on the S & AW PHaVE list (Liu & Myers, in press), we also sorted PVs in the TED corpus into three groups, the same as those in S & AW PHaVE list. The two authors and a third rater manually read concordance lines and double-checking PV meaning senses in context. Initially, the first author examined all PV tokens and where there was discrepancy, the second rater checked them. Last, the second author finalized the controversial PV meaning sense.

Preliminary Findings and Discussion

We found 147 PV types (about 3,357 phrase tokens) in 666,426 word tokens with the other 3 types unfound in our corpus. Compared with the data in COCA (unscripted TV or radio programs in USA) with multiple senses (2.19 on average per PV) investigated by Liu and Myers to produce the S and AW PHaVE list, we grouped our results into three groups: first, significantly different in both sense orders and percentages between S & AW list (COCA) and our TED corpus; second, similar in sense order but significantly different in percentage; third, not significantly different in either. Comparing with the spoken register of COCA, the results of our TED corpus are 59 PVs (40.4%), 63 PVs (43.1%), and 24 PVs (16.4%). On the contrary, in the written register, we found 52 PVs (35.6%) in the first group, 60 PVs (41%) in the second one, and 34 PVs (23.2%) in third group. Group 2 and 3 display the similarity between two corpus (TED-COCA [spoken] & TED- COCA [written]), and our TED corpus has the register inclination toward the written since there are more PVs in group 2 and 3 in the written register (74 PVs) than those in the spoken (67 PVs), which is different from the common assumption that TED talks are completely used in a spoken setting with its register features.

To clearly explain our PV distribution in TED Talks, we provide some examples in appendix A, which is based on the way Liu and Myers (in press) displayed their examples in their list.

Respectively compared to the spoken and written parts of S & AW PHaVE list, the major group of our TED PV distribution is in group 2 which means TED and COCA have similar sense order but distinct percentage. This may result from different corpus size as well as language use between COCA's data and our TED corpus.

Conclusion

ELF learners with different backgrounds have various needs for obtaining materials from either written or spoken media under CALL designs. As found, over half PVs in our TED corpus had one major meaning sense; therefore, learners can easily acquire those identified specific PVs by viewing TED Talks. CALL courseware designers are informed how to prioritize TED talks (or choose COCA) to assist particular learner groups in order to attend to their English needs via picking up PVs. In the conference, we will report findings of more TED talks.

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Appendix A. Comparison of sense order and percentages between TED and S & AW

Group 1	Group 2	Group 3
<p>Come out (TED):</p> <p>1. Sense 1: Physically leave, exit, or erupt from a place or object (40%) Ex: "Last night I saw a flying saucer. I was coming out of the pub after a few drinks."</p> <p>2. Sense 3: (Often <i>Come Out</i> + <i>And</i>) Announce, display, or emerge from STH else (37.1%) Ex: And of course, the issue of failure came out. I decided to confess to my friends the story of my failed business.</p> <p>3. Sense 2: Become known/discovered, released, or issued like a film, book, CD, including certain idioms (15.7%) Ex: And when I sat down to try and draw a picture of what that might look like, strange though this is going to sound, it came out looking like a doughnut.</p>	<p>Take on (TED):</p> <p>1. Sense 1: Undertake, handle, or challenge (role task, responsibility, problem, issue, etc.) (72.2%) Ex: No economist from last century saw this picture, so why would we imagine that their theories would be up for taking on its challenges?</p> <p>2. Sense 2: Assume characteristics; to become/acquire (27.7%) Ex: What I learned was what's more important than the actual thing I designed is an attitude that I had taken on while doing this.</p>	<p>Find out (TED):</p> <p>1. Sense 1: Discover STH; get knowledge of STH (100%) for both registers Ex: To find out what was going on, he did an ingenious experiment.</p>
<p>Come out (S & AW PHaVE list-Academic Written):</p> <p>1. Sense 2: Become known/discovered, released, or issued like a film, book, CD, including certain idioms (32.5%) Ex: It has come out that the school will close down.</p> <p>2. Sense 3: (Often <i>Come Out</i> + <i>And</i>) Announce, display, or emerge from STH else (33.1%) Ex: While the peace talks went on between the two parties, other groups came out against it.</p> <p>3. Sense 1: Physically leave, exit, or erupt from a place or object (28.3%) Ex: When he came out after the meeting, he met with the reporters.</p>	<p>Take on (S & AW PHaVE list-Spoken):</p> <p>1. Sense 1: Undertake, handle, or challenge (role task, responsibility, problem, issue, etc.) (82.6%) Ex: Team USA is taking on Team Canada in the hockey final.</p> <p>2. Sense 2: Assume characteristics; to become/acquire (15.1%) Ex: Tom takes on a very sad look.</p>	<p>Find out (S & AW PHaVE list)</p> <p>1. Sense 1: Discover STH; get knowledge of STH (100%) for both registers. Ex (spoken): We need to find out who did this to her. Ex (academic): The researcher is trying to find out why the experiment failed.</p>

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Telecollaboration among Malaysia, Mongolia, Thailand, and the Philippines to develop intercultural ebook on local indigenous knowledge system

Bio data



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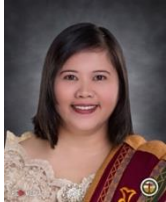
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Abstract

This paper aims to develop an intercultural ebook on local indigenous knowledge system (LINKS) in Malaysia, Mongolia, Thailand, and the Philippines using telecollaboration. It also aims to develop a telecollaboration model in the development of the ebook. Telecollaboration involves participants from different locations using Internet tools and videoconferencing with learning objectives. LINKS refers to the knowledge, traditional technologies by indigenous people used for survival which has faced deterioration due to content assimilation. The participants were 136 students and 8 professors from Malaysia, Mongolia, Thailand, and the Philippines. Using mixed methods, this study used questionnaire and key informant interviews to determine the LINKS and to design the ebook. Findings show that the telecollaboration model used this flow: A) Conduct LINKS inventory, (B) Discuss through Social Media and Email, (C) Conduct telecollaboration, and (D) Design and Publish the Ebook. The countries have common LINKS on navigation, farming, fishing, pregnancy and health, and avoiding calamities. The ebook design uses Dual Coding theory which presents the common LINKS among the countries with appropriate illustrations. Participants' evaluation showed that they strongly agreed that the telecollaboration model and the project promoted digital literacy, intercultural competence, content learning, fun, and motivation.

Conference paper

Introduction

Local and indigenous knowledge system (LINKS) refers to the cumulative and dynamic body of knowledge, traditional technologies, know-how and representations possessed by peoples with long histories of interaction with their natural milieu; and is intimately tied to language, social relations, spirituality and worldview, and is generally held collectively (International Council of Science, 2002). LINK practices are associated with traditional pharmacology, farming technologies and agricultural methods, environmental management, vegetation classification, cultural norms, belief systems, and others (Dei, 2011). Although greatly considered as traditional practices, LINKS includes present technologies by indigenous people for their daily survival (Onwu & Mosimege, 2004) in which the present society can learn from.

Despite its important role to sustainable development, LINKS is perceived to be of little value and is often equated to little more than lip service, which is seldom translated into action (Khupe, 2014). It has deteriorated due to content assimilation which resulted from the loss of interest of these practices from the young generation, thus cultural preservation is encouraged (Kinomis, 2016).

In addition, LINKS has not been strongly integrated in education due to prejudice by some academic societies and the dominance of Western science over other ways of knowledge (Khupe, 2014). To respond to these challenges on LINKS, the 2001 UNESCO Universal Declaration on Cultural Diversity aims to recognize and preserve LINKS embodying traditional lifestyles relevant for the conservation and sustainable use of diversity. It raises cultural diversity to the level of the 'common heritage of humanity' as necessary for humankind (UNESCO Universal Declaration on Cultural Diversity, 2002).

The use of technology is a catalyst to transform education as a tool to preserve these LINKS which are beneficial to the next generation. The 2001 UNESCO Declaration encourages the use of ICT in preserving the LINKS to promote wider dissemination of indigenous cultures (Matsuura, 2001).

This research project aims to determine the various LINKS from Malaysia, Mongolia, Thailand, and the Philippines through telecollaboration, and to produce an intercultural ebook about these LINKS. Telecollaboration is the use of computer and/or digital communication tools to promote learning through social interaction and collaboration, thus moving the learning process beyond the physical boundaries of classrooms (Sauro & Chapelle, 2017). It is a dialogic process that supports geographically distanced collaborative work through social interaction, involving synchronous or asynchronous communication technology for the participants to produce mutual outputs (Sadler & Dooly, 2016).

Research Questions

This descriptive exploratory research aims to develop an intercultural ebook about the LINKS from Malaysia, Mongolia, Thailand, and the Philippines through telecollaboration. It aims to answer the following questions:

1. What is the telecollaboration model used in developing the ebook?
2. What are the common LINKS among Malaysia, Mongolia, Thailand, the Philippines?
3. What is the evaluation of the students on the telecollaboration project?

Review of Related Literature

Telecollaboration

Telecollaboration is a dialogic process that supports geographically distanced collaborative work through social interaction, involving synchronous or asynchronous communication technology for the participants to produce mutual outputs (Sadler & Dooly, 2016). This internet-based intercultural exchange between people of different backgrounds (Guth & Helm, 2010) helps students enter into a new realm of collaborative inquiry and construction of knowledge, viewing their expanding repertoire of identities and communication strategies as resources in the process (Lai & Li, 2011).

Telecollaboration anchored on Project-Based Learning (PBL) can lead to optimum results for PBL is a systematic teaching method that engages students in learning knowledge and skills through an inquiry process structured around complex, authentic questions and carefully designed products and tasks (Buck Institute for Education, 2003).

PBL uses authentic, complex, and real-life tasks to motivate learning and provide learning experiences (William, Barbara, 1999). These real-life tasks include comparison and analysis tasks in which students analyze cultural products of both cultures, and the collaborative tasks in which students create together a final product (O'Dowd & Waire, 2009) Telecollaborators maximize the affordances of technology by using email, social networking sites, and video-conferencing (Develotte, Guichon, & Vincent, 2010).

Electronic books (Ebooks)

Ebooks are electronic versions of academic books, textbooks, reference books, and other one-off publications which have the portability and lightweight advantages than regular textbooks (Enright, 2004). Since the users of the ebooks are adolescents in this study, the use of ebooks can improve their learning experiences through the enhanced flexibility

of the curriculum delivery to accommodate the mobile lifestyle of the learners, improved efficiency in the use of study time, and new strategies for reading course materials; and improved student achievement (Ming, et al.,2011).

Ebooks cause a meaningful difference to be created in several contexts such as academic progress, variety of learning resources, flexibility while learning, and learning effectiveness between the students of virtual and conventional programs (Biranvand & Khasseh, 2014).

The Research Project

This exploratory research aimed to develop and produce an intercultural ebook documenting the LINKS from Malaysia, Mongolia, Thailand and in the Philippines. The ebook was used as an alternative instructional material on learning Asian cultures. The researchers are from the Univesiti Sains Malaysia (Malaysia), Mongolia State University (Mongolia), University of the Philippines High School Cebu (Philippines), and Suan Sunandha Rajabhat University (Thailand). They were the recipients of the UNESCO Thailand’s Telecollaboration Workshop on Reorienting Teacher Education towards Education for All and Education for Sustainable Development. For the student-participants, there were 11 Mongolians; 78 Thais; 8 Malaysians; and 39 Filipinos as shown in Table 1.

Table 1. Participants in the Telecollaboration

Universities	Countries	Students	Professors
Universiti Sains Malaysia	Malaysia	8	2
Mongolian State University of Educ	Mongolia	11	1
Suan Sunandha Rajabhat University	Thailand	78	1
University of the Philippines High School Cebu	Philippines	39	4
Total		136	8

This project was integrated in each country’s university course for one semester. For Suan Sunandha Rajabhat University, it was in Educational Technology; for Mongolia State University, it was in Teacher Education; and for Universiti Sains Malaysia, it was in Malaysian Culture and in Language Teaching. For the Philippines, it became a multidisciplinary project in English, Research, Social Sciences, and Science subjects. The researchers who were the professors handling the courses prepared the syllabi integrating the project in the course objectives, content, exercises, and assessment.

These students conducted an inventory of LINKS in their country for three months. A telecollaboration was conducted three times in December, January, and March to discuss and analyze the LINKS from the four countries and to design the ebook.

Methodology

This descriptive research used mixed methods. To gather the LINKS, the students from the four countries used participatory rural appraisal tools such as interviews from key informants and group interviews. They interviewed elderly, parents, fishers, farmers, and traditional health workers, mountaineers, regarding the different indigenous practices and used referral system to look for the other key informants. To determine the effectiveness of using telecollaboration, a teacher-made questionnaire was used to assess the experiences of all respondents.

Results and Discussion

Telecollaboration model in developing the intercultural ebook

The telecollaboration model in developing the intercultural ebook as shown in Figure 1 followed this process: (1) Conduct LINKS inventory in every country, (2) Discuss through social media and emails, (3) Conduct a series of telecollaboration, (4) Design and publish the ebook.

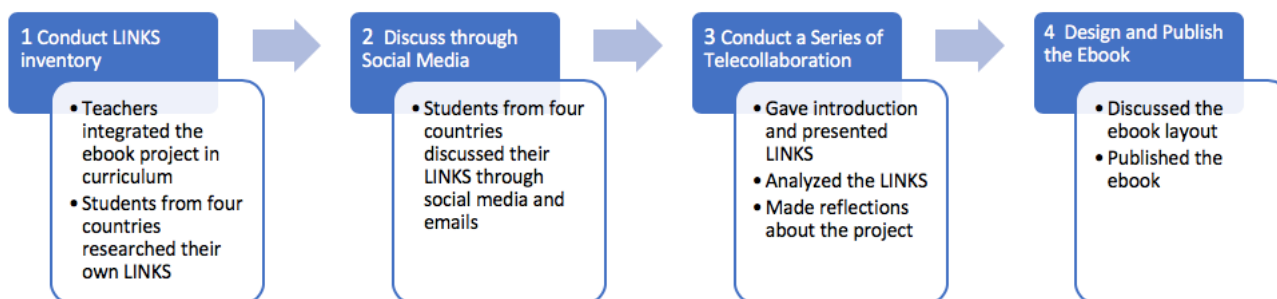


Fig.1. The Telecollaboration Model in Developing Intercultural ebook

In Stage 1, the researchers integrated the ebook project in their specific syllabi and determined the objectives, activities, and assessment of the project in relation to their course competencies. The researchers discussed the projects to their students. In this stage, the student-participants conducted LINKS inventory through interviews to their specific countries. Then they submitted the analyses of their LINKS to their professors. This first stage was anchored on Project-Based Learning (PBL) which engaged students in creating the ebook project through inquiry process structured around authentic questions about their LINKS (Buck Institute for Education, 2003; William & Barbara, 1999).

In Stage 2, the students from four countries formed small groups according to their chosen LINKS. They created a Facebook (FB) Group, a social networking site, where they discussed their findings, compared and contrasted the LINKS from the four countries, and traced the historical and socio-cultural contexts of the LINKS. The groups were the Calamity, Pregnancy and Health, Navigation, Farming, and Fishing LINKS.

In Stage 3, the participants, facilitated by their professors, conducted three telecollaborations. The telecollaboration platform was provided by Suan Sunandha Rajabhat University, Thailand. All telecollaboration sessions followed this flow: (1) Introduction, (2) Stating of the Session's Objectives, (3) Presentation, (4) Discussion, (5) Synthesis and Closing. All sessions lasted for three to four hours.

In the first meeting, the students provided introduction about their countries and universities. Group presenters from each category discussed their LINKS which was followed by question and answer. In the second meeting, the students analyzed their LINKS by discussing the similarities and differences of the Asian countries' geographical location, socio-cultural historical background, and cultures. In the third meeting, the students continued to discuss their LINKS and made reflections and assessment about their project and on their personal learnings. These interactions prove that telecollaboration develops students' collaborative communication and inquiry and construction of knowledge (Lai & Li, 2011). It allowed the four groups of nationalities to exchange their ideas about promoting their LINKS despite globalization. Figure 2 shows the telecollaboration.



Fig. 2. The Telecollaboration among Four Countries

In Stage 4, selected students and the researchers from four countries collaborated and designed and published the ebook. They collaborated through emails and Facebook (Lai & Li, 2011) which allowed to create the output together (O'Dowd & Waire, 2009).

Evaluation of the telecollaboration project

Table 2 shows the participants from the four countries "strongly agreed (1.645) that the telecollaboration model in creating the ebook used the appropriate ICT tools for the exchange of communications and video conferencing. Because of the quality telecollaboration platform from Suan Sunandha Rajabhat University, the participants believed that the project developed intercultural competence, confidence, higher level thinking during the discussion and analysis about the LINKS. They claimed that the research project allowed them to discover new knowledge about other Asian countries and cultures which were not formally taught in their universities.

Table 2. Overall Evaluation of the Telecollaboration Model and the Project

Mean	Qualitative description
1.645	Strongly agree

- 1.00-1.80 Strongly agree
- 1.81-2.60 Agree
- 2.61-3.40 Neutral
- 3.41-4.21 Disagree
- 4.21-5.00 Strongly disagree

The positive evaluation was validated in the open-ended questions where the respondents claimed that the telecollaboration platform allowed them to share and communicate with each other conveniently. Thai Student A said, "It was easy to share our ideas on how we can improve our LINKS through the social networking site and the video conferencing."

In addition, Mongolian Student A stressed, "We developed our skills of listening to each other, working in a team, and in social networking." The same assessment was given to Filipino Student A when she said that the Thai telecollaboration platform offered a higher quality video conferencing platform which could handle nine windows simultaneously conferencing.

Furthermore, the participants claimed that the whole project was fun and educational. Their expectations were met. Thai Student B said that the most enjoyable part of the project was they shared each country's LINKS and they discovered they had similarities, like in using ghost or supernatural stories to scare children from going out in the evening. On the other hand, Mongolian Student B commented that videoconferencing and Facebook chatting was enjoyable which also improved her ICT and English communication skills. Filipino Student B said that the regular telecollaboration made him more excited in presenting his LINKS to the big group. He found out that the LINKS in the four countries have commonalities especially on health practices like treating asthma.

The qualitative data validate the basic function of telecollaboration which supports geographically distanced collaborative work through social interaction, involving synchronous or asynchronous communication technology for the participants to produce mutual outputs (Sadler & Dooly, 2016). The geographic challenges and time zones of the four countries did not impede the participants to create an ebook.

However, the project also experienced logistical and technical challenges (Dunne, 2014) especially on the internet connection during the telecollaboration. The Philippines may have the most unstable connection but it did not totally obstruct the communication exchanges. The participants emailed the LINKS outputs in powerpoint format prior to the telecollaborations. In this way, all participants viewed their file while the country presenters were discussing their LINKS. In addition, FB groups and messaging were also used to verify some information presented in the telecollaboration.

The design of the ebook

The design of the ebook was anchored on Paivio's Dual Coding Theory which states that the human cognition consists of two subsystems that process knowledge simultaneously, one processing the nonverbal objects (i.e., imagery) and one dealing with language (verbal). The two systems have different functions--- the verbal subsystem processes and stores linguistic information whereas the visual subsystem processes and stores images and pictorial information. While the two subsystems can be activated independently, the interrelations and connections of the two systems allow the dual coding of information (Schutt, 2003). The relationship of the two systems has been shown to have some positive effects on recall (Al-Seghayer, 2001).

Designed and published by the participants, the intercultural ebook presents the similarities of the LINKS in the four countries. Figures 3-5 shows screen shots of the ebook.



Fig. 3. LINKS on Pregnancy

Figure 3 presents the LINKS related to pregnancy which the Philippines and Mongolia have commonality. In the Philippines, "Eating large amounts of pineapples can cause miscarriage" while in Mongolia, "Eating too much white mushroom may cause miscarriage."

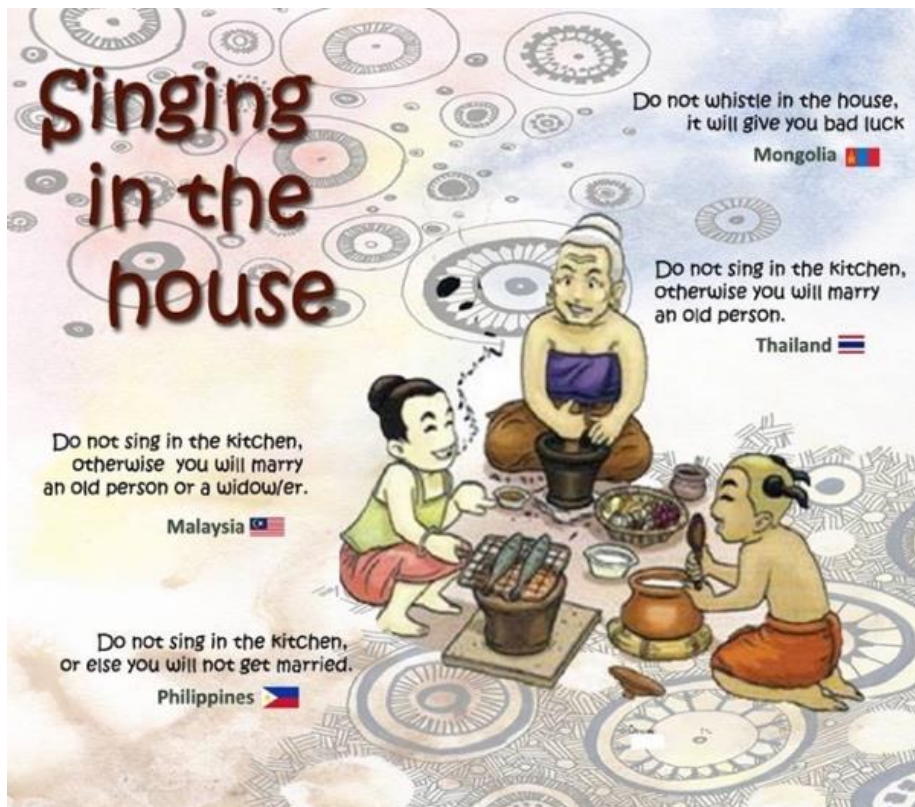


Fig.4. LINKS on Singing in the House

Figure 4 shows the superstitious belief of singing in the kitchen among the four countries. For Mongolians, "Do not whistle in the house, it will give you bad luck". For Thais, "Do not sing in the kitchen, otherwise you will marry an old person". For Malaysians, "Do not sing

in the kitchen, otherwise you will marry an old person or a widower.” For Filipinos, “Do not sing in the kitchen or else you will not get married.”

Having rice remained in a dish after eating causes dot-scars on your face

กินข้าวเหลือในจาน จะทำให้หน้าลาย



Don't leave any food on your plate. You will have misfortune.

Ayaw pag bilin ug pagkaon sa imong plato. Ma gabaan ka.

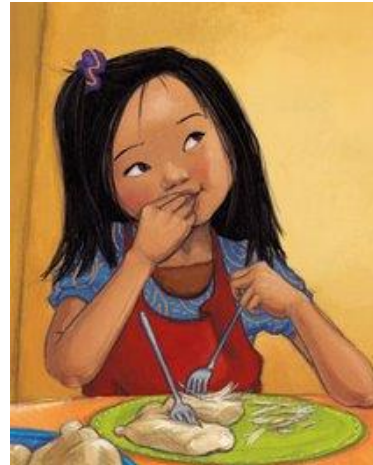


Fig. 5. LINKS on Eating

Figure 5 shows the parenting practice on eating habits. For Thais, “Having rice remained in a dish after eating causes dot scars on your face”. For Filipinos, “Don't leave any food on your plate. You will have misfortune.”

Conclusion

The telecollaboration process to (1) Conduct LINKS inventory, (2) Discuss through Social Media and Email, (3) Conduct telecollaboration, and (4) Design and Publish the Ebook was an appropriate model in achieving the research project in publishing an intercultural ebook on Asian LINKS. The use of Project-Based Learning coupled with the use of videoconferencing, social media, and email, was effective in exchanging knowledge and ideas about LINKS. The affordances of this telecollaboration technology allowed the students to orally discuss their ideas with their presentation slides and receive various feedbacks on real time. These qualities were not available to existing free social networking sites or applications.

For the indigenous knowledge, the four countries have common LINKS on navigation, farming, fishing, pregnancy and health, and in avoiding calamities. All countries use ghosts or supernatural creatures in the environment as themes in local stories to promote discipline among children. All countries avoid their pregnant women to go to the funeral or to do knitting. To produce more quality milk among breastfeeding mothers, Mongolians eat boiled radius and shank, and drink milk tea with millet. Filipinos, Thai, Malaysians eat soup with vegetables and fruits. The country's geographical location and culture have implications on its LINKS. Countries with many islands like Malaysia, Thailand, and the Philippines have common LINKS on fishing and on water navigation while Mongolia has more LINKS on land travel.

Overall, the project promoted digital literacy, intercultural competence, content learning, fun, and motivation to learn. This study recommends to conduct more telecollaborative projects among other countries and conduct further investigation explaining the socio-cultural background on the given LINKS. It also recommends computer science engineers and experts to design open source telecollaboration platforms for education.

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Learning to write business email by email exchange with smartphones

Bio data



I am a lecturer in School of Foreign Languages for Economics at University of Economics Ho Chi Minh City. I hold a PhD in TEFL/TESL from the University of Portsmouth, U.K. I am particularly interested in CALL, using technology in English teaching and how English language training can be improved with IT support, classroom research, teacher education and English language communicative competence required of graduates at the workplace.

Abstract

This paper explores how email exchange is able to motivate learners to practice writing business email in classroom, and importantly to support learners to understand cultural behaviors to write effective business email. The goal of this study is to investigate whether this pedagogy of doing simulated business-context email exchange enhance learner's motivation. There was a comparison on the same group of learners who did the same writing tasks on paper and on smartphones. The comparison is to explore to what extent learners are willing to invest energy to experience computer-based writing tasks comparing with doing the same tasks on paper. The different performance shows that tasks designed as relevant to what learners will be doing at the workplace to do on smartphones/computer would motivate learners in practising writing business email.

Key words: email exchange, business-context simulation, computer-based writing tasks, learner's motivation.

Conference paper

Introduction

Writing effective business email has been known as one of the most important skills for the workplace need of graduates. This need requires graduates not only the language skills but also sociocultural communication skills – know how to write a formal or an informal email in a proper context or how to use politeness strategies to express ideas effectively. It raises the importance of English learning and teaching tailored to such workplace needs of graduates. However, writing skills, particularly business writing, are always difficult for learners of ESP. The question of how to motivate students to get engaged to practise writing always challenge teachers.

The study was carried out in University of Economics Ho Chi Minh city where Business English is considered as the first goal to prepare for graduates. The study contends that writing tasks with the assistance of the computer could help to deal with the challenges. These tasks support learners to exchange emails in a simulated-workplace environment. From this, students will be supported to understand cultural behaviors to write effective business email.

Email and the positive effect of email exchanges

Email has been considered as an important aspect of communication since computer-mediated communication (CMC)- the discourse produced when more people used computers for interaction. Different forms of CMC include instant messages, discussion groups and email (Skovholt, 2009). The origins of email emerged from the two different theories in the research are: email has developed from the genre of written memos (Yates and Orlikowski, 1992); and email is derived from telephone conversations due to a new need in the business environment (e.g. communication across time zones) (Gimenez, 2000).

Email is defined by Gimenez (2006) as the phenomenon of "embedded" emails – a chain of connected messages being sent back and forth in contexts– which is likely to fulfil a particular need in globalized business environment, as a tool "when the complexity of the topic being discussed by a geographically dispersed team calls for team decision-making" (Gimenez, 2006, p.162). Furthermore, the facilities (the carbon copy and forward) are other key features of email which allow messages to be sent and passed to different levels of the recipients – whether actively involved or as "witnesses" of the process. This explains why email is considered as the most common means of communication by both employees and employers in companies (Vo, 2015; Vo et al., 2016).

Research has reported the positive effect of email interactions with computer support. Skehan (2003), for instance, evaluates interaction tasks important as 'interactive tasks produce markedly more accuracy and complexity'(p.349). Vinther (2011) supports the results reported by Levy and Stockwell (2006) that 'learners involved in email interactions demonstrated increases in both the accuracy and the complexity of the language produces' (Levy and Stockwell, 2006, p.104).

The setting of the study

The aim of the study

The study was carried out in the setting of EFL (English is used as a foreign language). In this context, learners have fewer chances to practise English outside classroom has been a challenge to achieve the goal. Furthermore, writing skills seem to be the most difficult skill for students to deal with. It has been reported that graduates from the university had limited English proficiency, particularly business writing skills to fulfil the requirements at the workplace.

This study explores how email exchange is able to enhance learner's motivation to practice writing business email in classroom, and importantly to support learners to understand cultural behaviors to write effective business email. It is to investigate whether this pedagogy of doing simulated business-context email exchange enhances learner's motivation.

Participants

There were 36 students involved in this study who were all university students of English for Foreign Trade at pre-intermediate level. This English program aims to support students to develop English communicative competences required at the workplace; particularly, business writing skills are put on the priority of the program to fulfil the requirements at the workplace.

The study comprised learner participants working in pairs or triads in two sections of learning writing email: one section in which email exchanges was done on paper, the other section email exchange practice was done on smartphones.

Tasks design and procedure

With the aim at preparing learners communication competence to meet the requirements at the workplace, students are step-by-step prepared four key language components. In this study, writing in career-related contexts is focused. Writing skills include the most frequent types of business English documents: summaries, emails, memos and reports.

The common business topics are: email of complaint, email exchanges for negotiation and email writing for a progress report. When exchanging emails, students were asked to send email to the class email account at the same time for giving feedback.

The students were engaged in the writing course over a period of four weeks. There were two class meeting sections each week. As for the objectives of the study, the course was arranged in the order: in the first section of the first week students did the tasks on paper; in the second section, the tasks were verified and done on computer or smartphones. In the second week, students did the tasks on computer first; the verified tasks were done on paper later. Each section was followed by feedback and discussion. The same process was applied for the rest two weeks. This arrangement provides the basis for the validation of findings in terms of their accuracy, checking for bias in research method.

Findings

Learners tend to make less mistakes experiencing computer-based email writing tasks than writing email on paper.

Linguistic features

The most common mistake which can be seen in learner's writing email is the use of linking words. For example, 'And', 'But' at the beginning of a sentence to connect with the previous ideas or transferring the ideas were used instead of 'However', 'Furthermore'. However, it indicates that the errors made writing on paper seem to be quite far away the correct ways to express the ideas than they are on smartphones as shown in table 1.

<i>Errors</i>	<i>Examples of errors</i>	
	<i>On paper</i>	<i>On smartphones</i>
Linking words	<p>And employees affect my company productivity.</p> <p>But at the moment, the buses are running late-15 minutes on average.</p> <p>But unfortunately, there are mistakes in your orders</p>	<p>I will give you a 5% discount per order, but you promise to pay the invoice in time from next transaction</p> <p>We are very sorry for this email but we have to send to you.</p>
Transferring/ Organizing ideas	<p>First, the customer service will operate 24/7</p> <p>Second, our amenities will have new modern equipment</p> <p>About our deliveries service, we are hiring more employees to boost our productivity</p> <p>So that we can give you our best services.</p>	<p>Besides, we offer two special vouchers</p> <p>Your company is also always delay the delivery</p> <p>So if you give us the better and cheaper services, we will pay as soon as possible.</p>
Tenses	Our revenue has increasing since we signed the contract.	The revenue increased since June
Model verbs	Perhaps your systems may have some troubles	I think your systems could have some problems

Note: Problematic structures are indicated in bold Table 1. Problematic structures in learners' writing email

The use of tenses and model verbs are the other common mistakes which were often found in the writing email. For example, though it was not exactly correct, the use of tenses was better when learners writing on smartphones than it was on paper. As for the same content, the expressions on the second columns (on smartphones) were easier to understand than they were in the first column (on-paper). Interestingly, while the average time limit for each writing task was twenty-five minutes, students spent 30 minutes doing the tasks on paper and 20 to 25 minutes doing the tasks on smartphones. This could be explained that students had more motivation writing email with their smartphones or computers.

Informal or Formal email

Considering formal or informal email is a major problem of most of English learners in email writing. Although recently this is regularly a focus in many topics for improving writing skills, supporting learners to be able to distinguish two types is still a challenge to English teachers. Learners tend to be more comfortable to write an informal email, however, formal email is used more in business contexts. Therefore, the form of professional and accurate structures which a formal email required is what learners need to prepare to use in the workplace.

It is very common that learners open or close an email with the titles 'Mr./ Ms' going with a first name. The reason could be Vietnamese people always use first names in communication. Although being reminded several times during the course, a number of learners still made these mistakes when writing email on paper. Interestingly, it happened less when the tasks were done on smartphones or computer.

<i>Errors</i>	<i>Examples of errors</i>	
	<i>On paper</i>	<i>On smartphones</i>
Subjects	Often without	More with a title Eg. Complaint about slow payment
Greetings Using First name	Hi Mr. Tien, Dear Ms. Tri, Mr. Long	Dear Mr. Tien, Dear Miss Nguyen,
Closing	Thanks Regards, Tien BB Company	Hope to continue our good business relationship. Yours sincerely/ Yours faithfully Tien Nguyen

Table 2. Informal or formal email

When writing an email on smartphones, email features such as the title, the carbon copy and forward are shown on the screen which could suggest writers (learners) to think about who they are sending to. This could lead students to pay more intention to think about the email style they are writing. For instances, while email subjects were often neglected when writing email on paper, learners often sent emails with a subject when they wrote it on their computer or mobile phone. Obviously, the benefit is that this can help the sender to attract the recipient's interest and attention. In the same vein, when exchanging email on smartphones, learners tended to use 'Mr./Ms' and sir names more for the greeting. This was similar when they closed their emails keeping in mind to use "Yours sincerely/ Yours faithfully" rather than "Thanks or Best regards" for a formal email.

Computer-based email exchange could create a simulated workplace environment to support learners to understand cultural behaviors in writing business email.

Learners found they have more motivation as if they were working in a simulated environment to practice business email on smartphones. For example, they could see an email to a manager could not been written in informal manner. In other words, the tasks could support learners to be aware of cultural factors (e.g. politeness, face-threatening) to use politeness strategies or avoid face-threatening for receivers. Such simulated workplace tasks include:

Email of complaint: Students were asked to write an email, e.g. to a supplier to complain about the mistakes (e.g. the wrong size, the wrong number) in orders; to a hotel to complain about the bad service.

<i>Errors</i>	
<i>Occurs more when students write on paper</i>	<i>Occurs more when students write on smartphones</i>
<p>I would like to complain about your hotel after that staying.</p> <p>These experience I really don't want to have any more</p> <p>I am disappointed with your service</p>	<p>We planned to stay with you for a week. Unfortunately, some bad things happen.</p> <p>Unfortunately, we had to change the hotels after two days because of some terrible experiences</p>
<p>I suggest that you should improve your hotels service and have training courses for your staffs carefully</p> <p>I really want to see the improvement next time we visit your hotel. (But I know that you and everyone are doing so well.)</p>	<p>I think you need to improve that in order to offer the best services to customers</p> <p>I hope our feedbacks will help your business grow vigorously and evolve thanks from top clients.</p>

Note: Bold indicates the errors Table 3. Errors in emails of complaint

The most important thing in this kind of email is to avoid face-threatening, a politeness strategy employed to save the addressee's face (Schnurr, 2013). The writer needs to write in the way that it avoids face-threatening for the receiver. For instance, the receivers could be offended receiving the complaint such as 'I am disappointed' or 'I don't want to have anymore'. They should be considered for the politeness to write in some ways as 'Unfortunately', 'I think', 'I hope'. Interestingly, the appropriate manners happened more in email exchange on smartphones than on paper. Clearer writing which avoids a confusion such as '[A complaint], But I know that you and everyone are doing so well' could see more when learners wrote email on smartphones.

Email of negotiation: learners were asked to write an email to ask for lower prices because of bad service or ask for a slow payer.

<i>Errors</i>	
<i>Occurs more when students write on paper</i>	<i>Occurs more when students write on smartphones</i>
<p>Recently, I have seen several surveys from other companies which show that they have the better and cheaper services. Could you please low the prices for a little?</p>	<p>Moreover, to be honest, your prices is not really reasonable. I would appreciate if you can slow down your price and improve your delivery department</p>
<p>Therefore, I would be the most grateful if you could decrease the prices for our company in order to make up for your mistakes.</p>	<p><i>Could you please take these problem into accounts</i> and have us a 30% discount on packaging materials?</p>

Note: Bold indicates the errors Table 4. Errors in emails of negotiation

For the email of negotiation, getting to a win-win situation is the key for the conversation. If the writer wrote in the way as 'I would be the most grateful if you could decrease the prices for our company **in order to make up for your mistakes**', he/she could go to 'lose-lose' or 'lose-win' situation. The partners would feel annoyed and hard to continue the business.

A progress report: learners were asked to write a report on search for new franchises (e.g. a haircare, sandwich shop).

	<i>Errors occur more when students write on paper</i>	<i>Errors occur more when students write on smartphones</i>
Opening	<p>I am writing this email to report the analyzing the risks of WCM when we exploit in Africa.</p> <p>I am writing a report for you to analyze and to evaluate some risks.</p>	<p><i>This report is</i> to analyze some risk to see all respect of our problem.</p> <p><i>This is a progress report</i> on source for two excellent supplier focusing on quality</p>
Linking words to arrange the findings/results in the report	<p>Without/None</p> <p>First, Second, Third</p>	<p>Firstly, Secondly, Thirdly</p> <p>First, Second, Third</p>
Ending	<p>Even though we are behind schedule and a little over budget. However, we expect to source at least two excellent suppliers.</p> <p>Even though our project will probably behind schedule as quality is more important than speed. Also I expect a little over budget</p>	<p>Even though we are running behind the schedule, I believe with hard work, quality and efficiency will make up for the time loss</p> <p>Although, the project is expected to be behind the schedule and a little over budget, we can guaranty the best quality ever.</p>

Note: Bold indicates the errors Table 5. Errors in writing reports

In a report, the objective of the report and the progress of work should be clear to tell how the project is carrying out. Statements of the objectives 'This report is to...' and conjunction words such as 'Firstly, Secondly, Thirdly' are very essential to make the report clear. The findings show that though learners made mistakes in both cases of writing, learners tended to have minor mistakes; for example, they used 'Firstly, Secondly, Thirdly' more when they were writing on smartphones. Though there were still some mistakes such as 'first, second, third' or errors in punctuation, writing on smartphones seems support writers to have clearer writing.

Conclusion

The interesting finding is that though it took more time for students to do the tasks on paper than on smartphones, learners writing email on smartphones are likely to make less mistakes than writing email on paper. It seemed to support results from previous study (Levy and Stockwell, 2006; Vinther, 2011) which report that email interactions produce positive outcomes with regard to increases in the accuracy. Though writing email on smartphones could be considered to be supported with predicting writing when some errors in spelling and grammar are corrected automatically by the software, it does not apply in this study: English requirements of learners are at intermediate levels of business English.

Another finding is that email exchange on smartphones is likely to enhance learner's motivation to practise writing business email. This finding is significant because it is encouraging to teachers in the context that Internet is not commonly used as it should be in classrooms due to teachers' heavy workload and large-sized classes. Though it is difficult to say exactly how much the motivation was, it is evident that learners were motivated to write following the requirements of business email. That is, while doing workplace simulated tasks on computer/smartphones, learners had more awareness of formal manners, politeness strategies required of email of complaints, emails of negotiation and writing a report. As a result, they showed more attention in choosing and using correct words and expressions. Email exchange on smartphones can also help instructors to give feedback to many learners at the same time with less face-threatening. The cultural behaviors in writing which need to prepare for learners were also emphasized through these tasks. It is a sign of success for learners and instructors to get closer to the objectives of the program. This pedagogy could be used for the implications for teaching methods and materials design at the university, and in similar contexts, to meet the workplace need of graduates.

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Future of CALL for Vietnamese Students

Bio data



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Abstract

E-learning environment is now widely used by the students in Vietnam beyond the classrooms to conduct their independent learning. However, few research studies investigated what activities the students had conducted when they assessed online in order to adjust the learning curriculum at universities. Two hundred thirty-seven students of the current study described their actual activities when they conducted their studies outside the classrooms and their expectations for the future learning conditions to support their studies. The study also revealed the most common types of social networks that they have employed for their self-studies. The results of the current study provided good thoughts for educational leaders to make wise decisions to apply e-learning activities at their universities.

Conference paper

E-learning environment has been widely applied in the curriculum of education in higher education around the world. Many universities and institutions develop their own e-learning system or software to help students enhance their learning beyond the boundaries of the four-wall classrooms. According to Azhari and Ming (2015) and (Thang, et al., 2016), e-learning in learning English as a Second Language (ESL) is not a new trend of teaching and learning methods in the Malaysian education system and has already been implemented in some of the universities in Malaysia. Livingstone (2015) also found that students are generally ready for e-learning and are prepared for this new educational initiative. In Taiwan, Chiu (2003) claims that Taiwanese college students hold positive attitudes towards e-learning by using computers to learn English. In particular, Kao and Wendeatt (2014) state that the e-learning environment helps students to stay engaged, relaxed, entertained and is effective on students' learning processes. E-learning also has a positive impact on learners' intrinsic motivation and learning attitudes. Also, students find course Websites to be helpful resources that enhance the understanding of course content, and that these Websites will continue to have an impact on higher education in the future (Nicole & More, 2008). Thang et al. (2016) surveyed students in four universities and confirmed that technology is useful for learning English as a second language (ESL).

However, the implementations of the e-learning environment in teaching and learning in higher education are not as practical as is expected. Different teachers in different environments made use of e-learning in different ways. Saata et al. (2012) found that lecturers and students commonly used the e-learning system at a university in Malaysia

just to upload lecture notes and download lecture notes. Furthermore, Souleles (2011) argues that e-learning can contribute little or nothing to teaching and learning. He/she adds there is a noticeable misalignment between perceptions and practices of e-learning and the associated rhetoric and literature of e-learning and innovative teaching and learning practices. In terms of teachers, Xing (2008) claims that most of the teachers at a university in China lacked a clear understanding of what e-learning is and what e-learning can do. In addition, the professional development in e-learning for college English teachers is insufficient both in terms of techniques and pedagogy in technology.

As educators, we need to understand the students' perception of e-learning as it has become one of the more successful practices for language learning and teaching among students and lecturers (Azhari & Ming, 2015). In order to shape the curriculum for Vietnamese institutions in applications of CALL into their teaching and learning activities, exploring students' current practices on CALL is a crucial issue. Discussion of applying technology in language learning classrooms, many educators are worried about students' budgets or the cost imposed on students' families (personal communication, 2017). However, the facts of students using technological devices are now not as hard as that in the past.

The findings of those studies such as Popovici and Mironov (2015); Saata, et al. (2012); Kao and Windeatt (2014); Pang et al. (2005); Eldeeb (2014); Keller and Cernerud (2002); Ibrahim et al. (2014); Ja'ashan (2015); Kar et al. (2014); Akkoyunlu and Soyly (2008) confirmed that (1) e-learning environment helped students engaged, relaxed and enjoyable and it had positive impacts on learners' intrinsic and extrinsic motivation and learning attitude; (2) e-learning was perceived to be a better learning experience compared to face-to-face learning; (3) e-learning and its effects on appealing students' participation on online lectures, workshop, and conferences; (4) e-learning provides an environment for students seeking help from their peers to practice their communication skills in English outside the classrooms in a more relaxing atmosphere; and (5) e-learning gives shy students chances to participate and share their opinions with their classmates online.

In order to provide useful information for universities in Vietnam to make orientations before employing e-learning system, the current paper aims to explore what actual activities the students had conducted when they accessed online beyond the classrooms, the social network they often use, and their perceptions on e-learning activities.

Methodology

The study surveyed 237 students at five Faculties at Van Hien University in Vietnam. The survey questionnaire items were constructed based on the need for applying e-learning to Van Hien University and by the researcher's observations. The questionnaire was designed based on the Office-forms (Microsoft Office forms) which were provided via the email system of the University. The link of the questionnaire was sent to the Deans of 5 faculties so that they could spread it to their students via either emails or Facebook. Facebook is very popular in Vietnam these days, and most of the students and lecturers owned an account for it. By providing the questionnaires through many forms of communication platforms, we were able to ensure that most of the students from each faculty had an equal chance to respond to the questionnaire. The data collection closed a month after the questionnaire-link was administered to the students.

In terms of quantitative data, software SPSS vs. 22 was used to conduct a descriptive analysis. The qualitative data (open-question items) was analyzed selectively based on the answers which directly responded to research questions.

Results

The data obtained from the questionnaire were presented mostly by the Chats of Microsoft Excel or the SPSS ver. 22 for means scores. Fig. 1 reports possessions of IT tools.

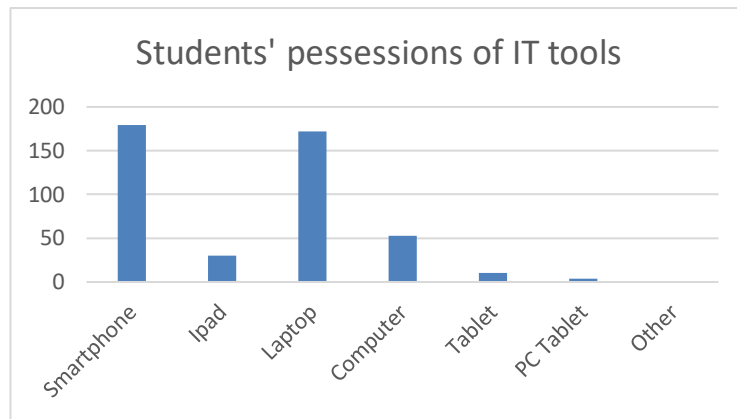


Fig. 1 students' possessions of IT tools

As displayed in fig. 1, 76% of the students (n = 179) today owned smartphones in their daily lives. Smartphones seemed to be popular in Vietnamese contexts where the prices were affordable to most of the students. Laptops were the second IT possession owned by students. 73% of the students (n = 172) equipped themselves laptops to support their learning activities. Laptops are a useful tool for students to carry to their classrooms to do assignments and search for information. 22% of the students (n = 53) owned computers in their daily lives to support their learning. The extensive use of smartphones and laptops indicates the potential for lecturers who wished to employed technological lesson plans for their teaching activities. The results of this study were consistent with Popovici and Mironov (2015) that most of the students owned digital devices and they made use of these tools in their daily lives. In order words, owning a technological device was widespread by the students not just in Vietnam, but other countries as well. The result of this study alerts that teachers take advantage of students' available devices to design the learning activities so that the students could learn at their own pace.

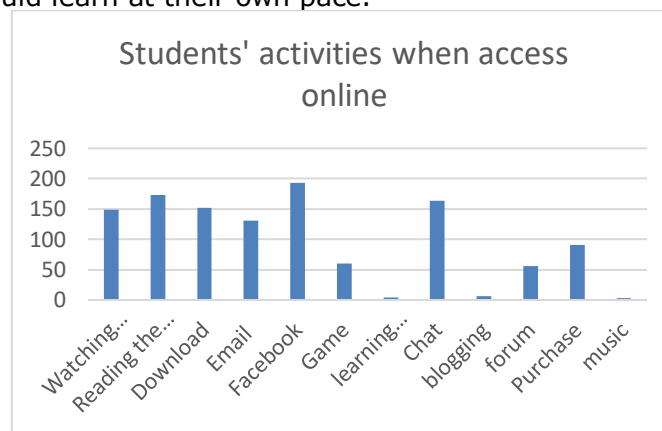


Fig. 2 Frequencies of students' activities when accessing online

According to the Miniwatts Marketing Group (2018), the population of Vietnam is 96,491,146 people and with 64,000,000 Internet users. As shown in the fig. 2, most of the students at Van Hien University used Facebook when they accessed online (n = 193; 81%). Facebook is popular amongst Vietnamese people today, especially with young people. The second most popular activity students engaged in was reading the news (n = 173; 73%). This includes the news in the Vietnamese language. This could be interpreted as the Facebookers often 'tag' news from other websites to their personal Facebook. Then all of their friends on their friend's list could see and read it. The third most common activity that the students committed to when they got online was chatting online with friends (n = 164; 69%). Students in Vietnam often use Facebook Messenger to chat with their friends or make new friends via Facebook and other related social media platforms. Social media platforms are an easy way for them to make friends with people from around the world, especially with native speakers to practice their languages. This result was consistent with that of Popovici and Mironov (2015) who found that their students used the Internet for

their socializing and communication. Consistently, students used the Internet to seek help from their peers and enhance their communicative skills (Ibrahim, Prain, & Collet, 2014).

Downloading materials for their learning accounts for fourth place (n = 152; 64%) in this survey. The Internet today has become a powerful tool for students to search for what they need to know and learn. With the help of Google Search, they could easily find their related learning materials for a second. It served as the world library for all of the students. Corresponding to this result, Saata, et al. (2012) also found that most students in Malaysia used e-learning for downloading learning materials and the lecturer's notes. The activities of watching movies (n = 149; 63%) and checking emails (n = 131; 55%) were also employed by the students when they accessed online. Students could watch movies on Youtube or other related websites to relax or check emails for their personal or public connection. These findings were useful for lecturers who wished to design their lessons via video clips or get connected with their students about the contents of their educational activities. Also, the results suggest that teachers change their teaching mode and activities to make their teaching more effective.

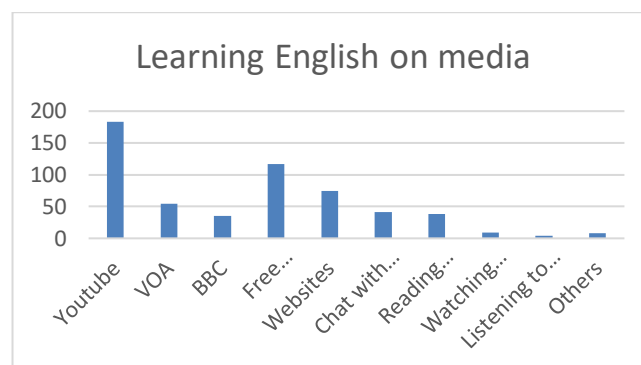


Fig. 3 Students' learning English via the media

Different from fig. 2 which presents students' activities when they access the Internet, fig. 3 reveals what kinds of media the students employed to enhance their English skills. As shown in fig. 3, the most media tool that the students used to enhance their English skills was Youtube (n = 183; 77%). Youtube was a channel which included many video clips, lessons, and stories in English that meet all the levels of learners' English proficiency. Therefore, most of the students loved to enhance their English via this channel. The second most used media to help students enhance their English skills was free software available online (n = 117; 49%). Relating to this issue, 77% of the students (n = 182) reported that they never owned a commercial software to learn and practice their English skills. 23% of them (n = 54) stated that they used to buy or have been owning one to enhance their English skills.

Students often accessed free software provided on the Internet to practice their pronunciation and grammar structures. These methods are an effective way to help students learn the accents of the native speakers of English. Websites relating to learning English were also the third concern by students (n = 75; 32%) as they could play games in English, learn the grammar of structures, or download materials to learn English skills. The VOA Learning English page was also considered by the Vietnamese students to learn and practice their English skills (n = 54; 23%). Besides, chatting with native speakers (n = 41; 17%), reading news in English (n = 38; 16%), and webpage BBC learning English (n = 35; 15%) were also sought by the Vietnamese students to learn and improve their English skills. These findings suggest that teachers make use of video clips on Youtube to support their teaching activities to make the classroom more effective. In addition, the teachers should assign the students to do projects such as making video clips and uploading to Youtube. The activities help students pay more attention to the "perfect work" when they showed their products to the real world.

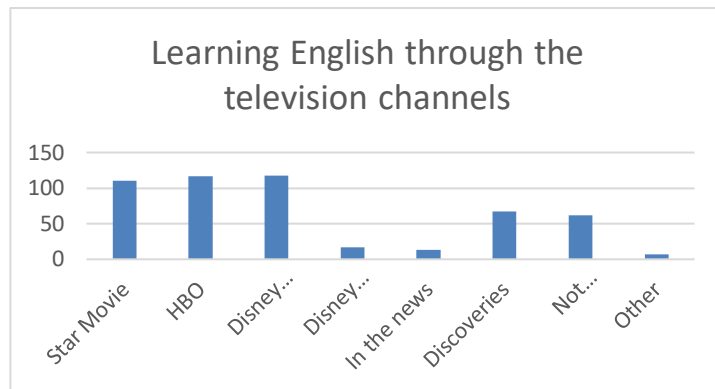


Fig. 4 Students' frequencies of learning English via the television channels

Besides making use of online tools to learn English, Vietnamese students were also in favor of channels on television to enhance their English proficiency. As can be seen from fig. 4, 50% of the Vietnamese students (2 = 118) frequently watched Disney Channel to enhance their English proficiency. Disney Channel was owned by the Walt Disney Company which produced many entertainment programs shown on television every day. Disney channels in Vietnam usually show young kids' movies, plays, and other forms of entertainment. Besides the Disney channel, 49% of Vietnamese students were also in favor of HBO Channel (n = 117), an American pay television channel, which has now expanded to several countries around the world. HBO (Home Box Office) regularly showed movies in English every hour so that any people who wished to enhance their English proficiency could watch it in their convenient time at home. In addition to the HBO channel, Star Movies channel was also seen by the Vietnamese students as a channel to enhance their English language. 46% of the students (n = 110) regularly watch movies in English from this channel to improve their English proficiency. The fourth favored television channel by Vietnamese students was Discovery channel (n = 67; 28%). Discovery is also another television pay channel in the United States which often shows documentaries or speculative investigations that interest young people to watch. These findings indicate that Vietnamese students often made use of media to enhance their English language beyond the boundaries of the classrooms. The study suggests that teachers (or curriculum designers) use some exciting scenes in the movies (movie-cut) as a resource for classroom activities so that the learning process could be more enjoyable.

Table 1. students' attitudes towards e-learning

Content	N	Minimum	Maximum	Mean	Std. Deviation
I like to learn English via the Apps on smartphones or tablets.	232	1	5	3.71	1.276
Learning English via software of websites helps me to better my pronunciation.	235	1	5	3.86	1.098
I like to take courses through the e-learning modes.	235	1	5	3.44	1.417
Valid N (list wise)	232				

As can be seen from Table 1, most of the students (M = 3.71; SD = 1.28) agreed that they liked to conduct their learning English via the Applications on smartphones or tablets. These tools were easy to carry and convenient for learning. Also, most of the students (M = 3.86; SD = 1.10) agreed that learning English via software or websites help them enhance their pronunciation appropriately. The students could learn the accents of the native speakers on these instruments. However, in terms of taking suitable courses of the curriculum through e-learning modes, not many students agreed on this kind of learning mode (M = 3.44; SD = 1.42). We can see that students preferred learning English online via

applications on mobile devices. Universities should take this into account when they design their learning curriculum. The following session will describe the students' preferences of the modes of learning styles between e-learning and traditional learning styles.

Table 2. Students' preferences of learning modes

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	100% e-learning	14	5.9	6.0	6.0
	30% e-learning vs. 70% face-to-face	70	29.5	29.8	35.7
	70% e-learning vs. 30% face-to-face	25	10.5	10.6	46.4
	50% e-learning vs. 50% face-to-face	76	32.1	32.3	78.7
	100% face-to-face plus e-learning	50	21.1	21.3	100.0
	Total	235	99.2	100.0	
Missing	System	2	.8		
Total		237	100.0		

Table 2 helps specifies the students' preferences of the modes of learning styles today. As shown in Table 9, the most preferred learning modes that students preferred was a combination of e-learning and face-to-face learning styles. 32% of the students (n = 76) preferred to learn 50% of e-learning modes and 50% of the traditional methods (face-to-face styles). 30% of the students (n = 70) wished to learn 30% of e-learning, combing with 70% of traditional learning methods. 21% of the students (n = 50) preferred learning 100% face-to-face styles, plus additional e-learning. In other words, the students still felt like learning with traditional modes, and e-learning was an additional method to support learning such as doing homework or projects at home. The findings show that students request to combine both learning styles (e-learning modes should be between 30% - 50%), instead of placing one to another. While the current study got 6% of students (n = 14) who preferred learning 100% of e-learning models, Eldeeb (2014) found that only 4% of the students preferred to have a fully online course, 23% preferred a full traditional classroom course, and 73% preferred mixed-mode - web supplemented courses- rather than a complete web-dependent course.

Similarly, Eldeeb (2014) found that students preferred mixed modes and e-learning as a supplementary course rather than a solely online course. Furthermore, Akkoyunlu and Soylu (2008) found that students still preferred face-to-face interactions and e-learning should not be used as a substitution for the traditional learning mode because the lecturers were seen as important to help students with their problems and motivate them in learning activities. These findings indicate that students request to combine both learning styles (e-learning modes should be in between 30%- 50%), instead of placing one to another.

Table 3. Vietnamese people's perceptions on taking courses online

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No idea	3	1.3	1.3	1.3
	Low evaluated	102	43.0	43.2	44.5
	the same as that of face-to-face learning	59	24.9	25.0	69.5
	highly evaluated	67	28.3	28.4	97.9
	very highly evaluated	5	2.1	2.1	100.0
	Total	236	99.6	100.0	
Missing	System	1	.4		
Total		237	100.0		

Table 3 summarizes what the students were thinking about the Vietnamese people's evaluation of taking online courses. Their concepts were still mixed. 43% of the students (n = 102) supposed that taking courses online was low evaluated by the society while 30% of them (n = 72; 30%) thought it was highly evaluated. 25% of the students (n = 59) supposed that taking online courses were evaluated the same as that of face-to-face learning modes. This item came from the shared perspective of the Vietnamese society that obtaining degrees online via taking online courses were not as qualified as that of the traditional methods (face-to-face learning). This might explain the issues that while e-learning modes brought lots of benefits to the students (see tables 10a & 10b), only 6% of the students (see table 9) preferred 100% of e-learning modes without face-to-face learning. In other words, the students in Vietnam were still sensitive about taking courses online to earn a degree.

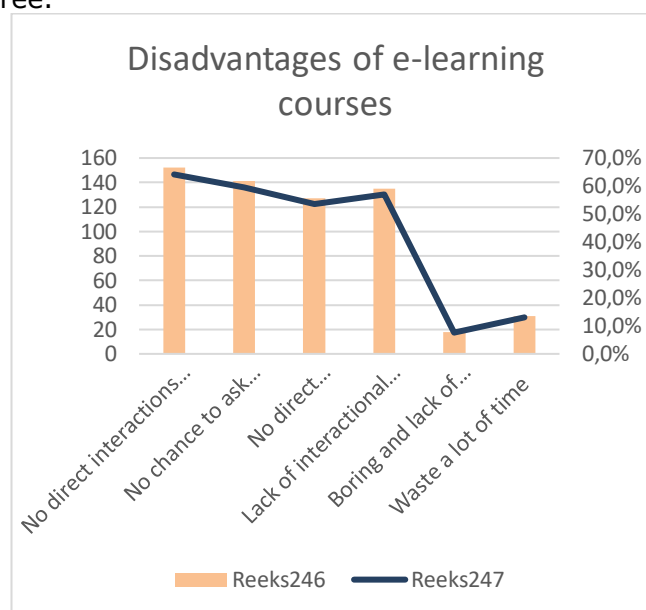


Fig. 5 Disadvantages of e-learning courses

Fig. 5 summarizes students' perceptions on the disadvantages of taking e-learning courses. As can be seen, 64% of the students (n = 152) stated that they did not wish to take online courses only because this mode of learning prevented students from interacting directly with the teachers. 60% of the students (n = 141) claimed that e-learning modes did not provide them chances to ask the teachers directly whenever they raised questions. 57% (n = 135) confirmed that the disadvantages of e-learning courses were a lack of interactive environments for the students to practice their languages. 54% (n = 127) of the students stated that e-learning modes prevented them from communicating directly with their classmates. Different from the result of this study, Pang et al. (2005) claimed that e-

learning was perceived to be a better learning experience compared to face-to-face learning mode. Similar to Pang et al. (2005), Akkoyunlu and Soylu (2008) found that their students preferred face-to-face interaction. The results of this questionnaire helped clarify the reason why most of the students in Vietnam preferred the combination of e-learning and face-to-face learning modes described in Table 2.

Conclusion

In short, the results of the study reveal that, first, IT tools such as smartphones and laptops were the favorite devices equipped by the students to assist their learning activities. Teachers should make use of students' devices to design the learning activities so that the students could learn with their own pace. Second, most of the students liked to conduct their learning English via applications on their smartphones or tablets because these tools were easy to be carried and convenient for learning. It could be useful in case teachers design lessons on Apps in order to help students conduct their learning frequently whenever the mobile devices were on their hands. Third, most of them used free software and social network such as Youtube, VOA learning English, BBC Learning English to help them learn English by themselves. Accordingly, chatting with native speakers and reading news in English were also employed by the students to do their independent learning of English. These findings indicate that teachers or curriculum designers should change their teaching activities into employing available video clips online, or use some interesting scenes from movies as resources for the classroom activities so that the learning processes could be more enjoyable. These activities would request students to give more effort in their learning activities when they wished to show their products to the real world. Fourth, most students wished for e-learning modes to be combined with face-to-face learning activities (from 30% to 50% of e-learning) rather than a substitution. The reason for not using e-learning could be, in Vietnam, taking courses online to obtain degrees was not highly evaluated by society. Besides, learning with the online modes had certain disadvantages in terms of communication between the teachers and their classmates.

Though the current study explored most of the students' activities and perceptions of e-learning to enhance their independent learning of English, it has some limitations as follows. First, the samples in this study were just limited to the students at Van Hien University so the sample might not be generalized to other more significant contexts. Further research should employ a larger population to obtain a bigger picture for the educators in Vietnam to make the right decisions to apply e-learning in the Universities throughout the country. Second, this study employed only quantitative data to analyze for the results; some deeper issues attached in the findings might not be covered. Future research should take this issue into account.

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Designing CALL courseware for an EAP situation: a report on a case study

Bio data



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Abstract

This paper reports, by means of a case study, how a principled, EAP approach has been applied to CALL (computer-assisted language learning) courseware design. A case study of a defining skills package, designed for undergraduate students in the University of Science and Technology Beijing, is used to illustrate this EAP approach. The first part of the paper details the various stages of the courseware design and proposes a synthesis of the language-centered, academic skills-centered and learning-centered approaches to the CALL courseware design. The second demonstrates with examples how different resources of digital tools and multimodal media have been exploited to devise and produce defining skills CALL materials.

Conference paper

Introduction

This project was first conceived as a response to many requests from undergraduate, graduate and postgraduate students, as well as from teachers across disciplines from different schools in the University of Science and Technology Beijing (USTB) for improvement of students' academic communication skills in both spoken and written English. For various reasons which are dealt with in the section on "Learning Needs", a decision was made to promote an English academic skills package in the blended EAP (English for Academic Purposes) courses in USTB, of which the defining skills package is the first in this project. CALL courseware is an ideal medium and critical support for different learning situations, such as blended learning, self-access learning, etc., as tasks can be worked through online and without the physical presence of teachers. The program occupies a critical position in the blended EAP course design, delivering course content and interacting with students to construct an online community of EAP learning. It can also serve as a self-access EAP learning center where learners are enabled to select those materials which are directly relevant to their own learning situation and to progress through the activities at their own pace.

With the rapid development of technology and the widespread use of online open course platforms in China's higher education, as in many other countries (Ana, 2016), many universities throughout China have started to optimize traditional classroom English learning with the latest CALL or MALL facilities (Jiang, Renandya & Zhang, 2017; Tsai, 2019;

Gu, Zhang & Gu, 2019), either for self-access learning as part of course components, or for blended learning and flipped classroom learning. Various innovative authoring systems, such as MOODLE, open online course platforms and mobile learning applications (Zou, Li & Li, 2018), are popular among English teachers since they require a minimum knowledge of software programming skills and allow them to develop a bank of courseware materials highly relevant to their students' learning needs within a relatively short period of time. However, a survey of the literature in the field of EAP instruction reveals that existing courseware was usually not systematically designed for a specific group of learners. This paper is an attempt to demonstrate, by means of a case study of the defining skills package, how a principled EAP approach has been applied to CALL courseware design utilizing an online open course platform in China to devise a set of materials highly relevant to students' learning needs.

The first part of the paper details the various stages of the courseware design and proposes a synthesis of the language-centered, academic skills-centered and learning-centered approaches to the CALL courseware design. After an analysis of learning needs, based on the analysis of definitions in a corpus of academic writing, drawing upon the findings of the existing literature of definitions in different academic genres, it covers issues related to the defining skills package. The significance of defining skills for EAP learners are highlighted in relation to the ideational, interpersonal and textual functions of definitions in academic settings. The defining skills package are constructed with both the communicative functions and linguistic realizations of the definitions considered. The second part demonstrates with examples how different resources of structural and functional aspects of definitions in academic writing, digital tools and multimodal media have been exploited to devise and produce defining skills CALL materials. Finally, the paper illustrates the ways this CALL courseware can be applied for EAP learners.

Learning needs

Analysis of needs from the learner's perspective is an important part of any instructional project design (Lytle, 1988). Hamp-Lyons (2001) points out that EAP begins with the learner and the situation, whereas General English begins with the language. The assessment of students' learning needs remains fundamental and critical to EAP curriculum development and course design. Therefore, understanding students' learning needs is a good point of departure for designing an EAP course, tasks and materials (Flowerdew and Peacock, 2001). In this paper, the needs analysis draws on three strands of theoretical insights. The first is the insights of Munby (1978) on communicative syllabus design which are very much language-centered and focuses on the target situation. It also takes account of the learning-centered approach proposed and advocated by Hutchinson and Waters (1987), which considers the conditions of the learning situation and how learners learn. The needs analysis also concerns the application of genre analysis (Swales, 1990; Swales & Feak, 2012) for the developing and writing of academic skills-centered materials and tasks.

Applying Munby's operational instrument, three main types of learners in the local context of USTB have been identified as end-users of the CALL courseware. It is expected that the majority will be first year science, engineering and business students who are taking courses where English is the medium of instruction and are taking a blended EAP course regularly in USTB. Another group consists of students of other majors whose general level of English is high and who want to study abroad after graduation. A third potential group comprises graduates and postgraduates who are using English as a medium of research, either reading research articles published in English, or listening to lectures delivered in English, or planning to write and publish their research in English. It makes most sense to offer academic skills packages that can be available for any student to consult and which fulfil a genuine need in specific situations.

Applying Swales' genre analysis, various key English academic skills, such as defining, explaining, comparing, contrasting, analyzing, discussing, evaluating, synthesizing, etc.,

are identified as fundamental skills that Chinese students need to develop in order to communicate in academic situations both in writing and orally.

This paper focuses on the defining skills. It illustrates, by a case study, the development of CALL materials for the defining skills package for the blended EAP courses that take the improvement of students' English skills for academic purposes as their pedagogical aim. The CALL materials were authored via the open online course platform—iCourse (www.icourses163.org), co-built by the Higher Education Press and NetEase in 2014 and responsible for the operation and management of China's national-level MOOCs (Massive Open Online Courses).

Functional specification of materials

The present paper determines the functional specification of the material by relying on Swalian (Swales and Feak, 2012) genre analysis of definitions in a corpus of academic writing and the findings of the existing literature of definitions in different academic genres (Triki, 2019). Definitions have been studied since ancient times (for example, Aristotle) in an attempt to understand the essence of things (real definitions) and the meanings of words (nominal definitions) (Triki, 2019). They are used in almost all types of academic genres and in both spoken and written academic discourses and texts. By definitions, writers and speakers elaborate explanations of terms, ideas, concepts, etc., to provide clarity and highlight the pertinence of research findings. Definitions have various structural and functional realizations, and are considered a recurrent "function" and one of the "syndromes" of scientific writing in both its popular and academic forms (Halliday & Martin, 1993).

Functions of definitions

The basic function of definitions is to elaborate on the meaning of the defined objects which could be (1) a new term, thing, idea, notion or concept, which is unfamiliar but key to audience understanding, (2) a commonly used word or phrase, which is given a different meaning in a research paper or academic lecture, (3) an important term that will help expand upon a point in academic writing or speaking, (4) a term, thing or concept over which there might be confusion if the writer or speaker does not make it clear, (5) a familiar term, which the writer or speaker wants the readers or audience to understand in a new way.

According to Halliday (1988, 1994), defining units (clauses), like most English clauses, are intrinsically multifunctional. They express different kinds of meaning simultaneously, among which ideational meaning, interpersonal meaning and textual meaning are the three metafunctions. In designing the CALL courseware for the defining skills package, the three metafunctions were given full consideration.

Linguistic realization of definitions

Definitions have been found to vary from short and simple linguistic realizations to expanded and lengthy paragraphs or texts (Trimble, 1985; Harvey, 1999; Swales & Feak, 2012; Triki, 2019). The length and extent of a definition depend on its purpose, the level of familiarity the audience has with the defined objects, and the extent to which there is an accepted common understanding of the term, thing, concept or notion. The smallest unit of a definition might be a short sentence, or a parenthetical addition to a sentence, while the larger unit of a definition could be a substantial part of a paper, and the largest unit might be a whole paper, or even a whole book.

Whatever their length or extent, definitions usually have three basic elements: term, class and differentiating features (Harvey, 1999). The term is what is being defined, and the class is the broader category that the defined term belongs to. Both elements are realized linguistically through nouns or nouns phrases. The differentiating features are what distinguish the defined term from other items in the same broad category. The linguistic realization of the differentiating features can be as short as a noun phrase or a prepositional phrase, as long as a clause, and as large as a paragraph or a text.

Accordingly, we used these specifications in designing the CALL materials. Four types of materials have been designed to construct the defining skills package. The first type is the video lecture of 8-10 minutes, delivering basic knowledge about defining skills. It includes five lecture videos focusing respectively on the critical thinking of defining skills, skills of reading definitions, listening skills for taking notes of definitions and speaking skills delivering definitions, the linguistic features of definitions, and writing skills for producing definitions. In each video, there are embedded multiple choice questions or blank filling exercises that will pop up while the video is playing. This creates interaction between learners and the content of the videos. The second type includes authentic academic reading and listening materials that help learners practice defining skills. The third type is tasks that help consolidate the factual and procedural knowledge of defining skills. The tasks offered range from true or false questions, to writing a simple definition, and to producing an extended definition of a term, concept or notion from the learner's field of study. The fourth type is discussion topics related to defining skills, and this is posted in the forum section of the online open course platform. In the online forum, learners can also post questions and share information so as to interact with both teachers and other learners. The forum and learners' interactions thereby create an online learning community.

While writing the materials, we used authentic examples from the corpus we constructed ourselves. The corpus consists of 40 journal articles from each of three disciplines: materials science, engineering, business and management.

Description of the authoring program

The defining skills package was implemented using the iCourse platform, which is the most used open online course platform in China. It is a versatile program, as it allows the teacher to package different types of learning resources: multimodal learning resources including videos, audios, images, and texts; and several task types including multiple choice, blank filling, true or false, short answer questions, and writing. For the objective tasks, the program can give instant feedback, and for the writing tasks the program supports both teacher feedback and peer review.

The following section describes how each function of the program has been exploited for a selection and presentation of the different learning resources. In the construction of the defining skills package, we have considered the learners' current level in relation to the target level.

Implementation of the authoring program

Video lectures module

By utilizing the function module of presenting video resources and supporting interaction between learners and learning content, we offer five video lectures on defining skills. The first is a "Brief introduction to definitions" which covers: (1) understanding what a definition is, (2) recognizing the importance of definitions, (3) understanding when a definition is necessary and should be given, (4) understanding the paradigm pattern of a definition, and (5) distinguishing good definitions from poor ones.

The second video is "Reading definitions for information" which covers: (1) understanding definitions of different lengths, (2) reading in a prediction-confirmation pattern, (3) reading definitions in literature, and (4) defining by referring to literature.

The third video is "Definitions in lectures" which covers: (1) understanding definitions of different lengths, (2) reading in a prediction-confirmation pattern, (3) reading definitions in literature, and (4) defining by referring to literature.

The fourth video is "Three steps to an extended definition" which covers: (1) writing formal definitions, (2) writing naming definitions, and (3) producing an extended definition.

The fifth video is "Vocabulary: Noun phrase" which covers: (1) understanding the functions of nouns in academic texts, (2) using different forms of nouns, and (3) expanding nouns by adding modifiers.

Exercise and test module

This module has been used to present exercises and tests that help learners consolidate what they have learned in the videos and practice the relevant skills in the defining skills package. The module provides instant feedback and supports self-access learning effectively. It has been also used to launch the final test for the course.

Discussion forum module

This module has been used to create an online learning community. It includes such tasks as discussion, short answer questions, information sharing, exchanges of ideas, etc. The online community thereby established provides learners with a social environment for academic learning.

Peer review module

This module has been used to offer writing and peer review tasks. Learners are required to produce an extended definition of a term, concept, notion or theory in their own field of study. The module will randomly assign each learner five pieces of writing by their peers to evaluate. Learners need to give marks and make comments and suggestions about their peers' writing. And this peer review work in turn earns learners marks as part of the 20% of the total score for the writing task.

Conclusion

In this paper, we have reported, by means of a case study, how a principled, EAP approach has been applied to CALL (computer-assisted language learning) courseware design. A case study of a defining skills package, designed for undergraduate students in the University of Science and Technology Beijing, is used to illustrate this EAP approach. In responding to students' learning needs, we proposed a synthesis of language-centered, academic skills-centered and learning-centered approaches to CALL courseware design.

There are several scenarios where the CALL courseware can be used. One is a traditional multimedia equipped classroom where the courseware helps the teacher demonstrate knowledge of definitions in EAP situations. A second is a blended learning environment where EAP students learn online on a MOOC platform or other online course platforms and practice offline in the classroom. A third is a self-access EAP learning center where students can cover the materials in the CALL courseware at their own pace and which allows students to select those activities which are directly relevant to their own situations or in which they would like extra practice.

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English majors creating bilingual picture books: a collaborative online task

Bio data



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Abstract

Research shows that the task of collaborative picture books could help language learners practice the target language in a creative way. However, one challenge of this task is that language learners may feel frustrated when group members lack drawing skills. In this study, an English teacher collaborated with an art teacher to seek to overcome this problem. The two teachers arranged for their students from two different campuses to meet online and create picture books together. A total of seven groups were formed; each group consisted of four English majors and their English teacher from Yen-Chao campus, and one Art major as well as the art teacher from First campus. During the one-semester collaboration, the English majors were responsible for the English and Mandarin content of the picture book, while the Art majors were in charge of drawing pictures. Each group brainstormed, discussed, and share their work on the social media platform LINE. The two teachers monitored the progress of the group project and provided their advice whenever it was needed. At the end of the semester, students successfully completed and published seven bilingual picture books. The results of the questionnaire showed that the majority of students held positive attitude toward the collaboration task, and art students suggested

that in addition to online communication, group members should meet face-to-face at least once to clarify their thoughts.

Conference paper

Introduction

Creating picture books in the target language could boost foreign language learners' learning interests and also their learning achievements (Arisa, 2015; Sun, 2017). However, for those learners who cannot draw well, being asked to complete a picture book might be an unpleasant experience. To make matters worse, members of one group might all lack illustration skills, but still have to complete a collaborative picture book. This situation may be avoided if the teacher could find someone with artistic talent to join the team. In this way, language learners could concentrate on the linguistic aspects of the story, while the "artists" could illustrate the story with beautiful pictures.

Previous studies on collaborative learning have mainly investigated how learners in the same class interacted with each other. Studies focusing on how the online meeting of the learners with different majors influenced the learners' perception of the experience are limited. This study examined two groups of university students, from different academic backgrounds, working with each other to complete a collaborative task, namely, picture books. Using "Line group" as the communicative tool, the participating groups successfully created ocean-themed bilingual picture books. Collaborative learning theory constructs the theoretical framework of the study while trans-disciplinary learning practices highlight the implementation of the learning task.

The study aims to answer the following research questions.

1. What are language students' perceptions of the collaborative learning?
2. What are art students' perceptions of the collaborative learning?
3. What are students' suggestions for their teachers?

Theoretical Background of the Study: Collaborative Learning

Vygotsky's concept of zone of proximal development proposes the importance of learning through interactions with more capable others. When working with peers to complete a collaborative task, defined as "a coordinated, synchronous activity that is the result of a continued attempt to construct and maintain a shared conception of a problem" (Roschelle & Teasley, 1995, p. 70), EFL students are found to improve their reading capability (Yang, Chuang, Li, & Tseng, 2013), writing skills (Faustin, 2013; Linh & Suppasetsee, 2016), and vocabulary (Afghari & Khayatan, 2017). In addition, classroom teachers have observed that collaborative learning fits with the teaching philosophy as the EFL students work together, build together, learn together, change together and improve together (Stapa, 2009). Although collaborative learning, especially in an online learning environment, may suffer certain drawbacks, such as limited social interactions (Pang, Lau, Seah, Cheong, & Low, 2018) or social loafing, "a matter of expending less energy on a task than if one were working alone on that same task" (Ashcraft & Treadwell, 2007), yet collaborative learning approach is still considered beneficial as it promotes higher-order thinking (Gokhale, 1995) and initiates knowledge co-construction (Imai, 2010) and therefore helps lead to better learning performances.

Methodology

In this study, an English teacher recruited 27 English majors from her class of Freshmen English on Yen-Chao campus, and an art teacher recruited 7 Art majors from his class of Innovation and Aesthetic on First campus. They asked their students to form seven groups. After English majors found their group members, one art-majored student was randomly assigned to the group. As a result, each group consisted of 3 to 4 English majors and 1 art major. Students were requested to create a bilingual group picture book with the theme of 'ocean' because their school is located in an ocean city and the teachers aimed to raise students' ocean awareness through the collaborative project.

To help students become familiar with the format and style of the picture books, the English teacher asked her students to read six English ocean picture e-books as the outside reading materials. Each week students read one picture book, posted their reflections about the story on the school e-learning platform, and then their group members gave online peer feedback. After six-week practice in reading picture books, students started to create their group picture book. During the process of collaboration, English majors and art majors exchanged opinions through the social media platform LINE. As a result, seven beautiful English online picture books were created and successfully published. See one example as follows.



P.1
A little boy named Tommy always litters the beach. He thinks that he has the right to litter whenever he wants.

有一個叫湯姆的小男孩，他常常在海邊亂丟垃圾。湯姆覺得他可以隨心所欲想丟就丟。



P.2
One day, he is about to dump his trash into the ocean as usual.

有一天，就在他正要像往常一樣把垃圾丟到海裡的時候。



P.3
Suddenly, the wind blows and the clouds change color.

突然間，風雲變色。

The little boy is swept into the ocean by the strong waves.

小男孩被大海浪捲入海洋裡。

In the last week of the semester, each group presented their picture book in class, and then other groups gave comments and scores based on the scoring rubrics provided by the teacher. Finally, to understand students' perceptions of the class, students filled the exit questionnaire, including 8 Likert scale questions, 2 multiple choice questions, and 5 open-ended questions.

Result and Discussion

Table 1-1 shows that 92.5% of the English majors held positive attitude toward the collaborative task. They liked to collaborate with peers in creating the picture book. Moreover, they fully devoted themselves to complete the project. Concerning the task of peer feedback, the majority of students also worked hard to do their best. They said they enjoyed viewing others' projects online and learning from their classmates. Another positive result is that the majority of the students felt they benefited greatly from the collaborative task (92.5%), and the task of group picture book is especially beneficial to their English ability (88.9%).

It is noteworthy that while almost all language students gave positive responses to the above-mentioned questions, two language students were not happy about the collaborative task. Among the eight questions, they gave all negative answers. The possible reasons for their negative attitude will be discussed later.

Similarly, all art students held positive attitudes toward the group project. However, two art students were unhappy about their team members' commitment to the group discussion, and they doubted that the project was beneficial to their English ability (see Table 1-2).

Table 1-1. English majors' perceptions of the collaborative task (N=27)

Items (Agree % vs. Disagree %)	TA		A		PA		DA		TDA	
	N	%	N	%	N	%	N	%	N	%
I like to collaborate with peers in creating the group picture book. (92.5% vs. 7.4%)	6	22.2	12	44.4	7	25.9	2	7.4	0	0
I think I fully devoted myself to the project of group picture book. (92.5% vs. 7.4%)	9	33.3	11	40.7	5	18.5	2	7.4	0	0
I was serious when I evaluated other groups' projects. (92.5% vs. 7.4%)	7	25.9	10	37.0	8	29.6	1	3.7	1	3.7
I think other groups dedicated themselves to evaluating our group's project. (92.5% vs. 7.4%)	4	14.8	9	33.3	12	44.4	2	7.4	0	0
I like to view other groups' projects online and learn from them. (92.5% vs. 7.4%)	5	18.5	5	18.5	13	48.1	2	7.4	0	0
I feel that I have benefited greatly from the collaborative project. (92.5% vs. 7.4%)	9	33.3	7	25.9	9	33.3	2	7.4	0	0
I feel the task of group picture book is beneficial to my English ability. (88.9% vs. 11.1%)	3	11.1	8	29.6	13	48.1	2	7.4	1	3.7
All in all, I like the task of group picture books. (92.5% vs. 7.4%)	9	33.3	7	25.9	9	33.3	2	7.4	0	0

Note: TA= totally agree, A= agree, PA= partly agree, DA= disagree, TDA= totally disagree

Table 1-2. Art majors' perceptions of the collaborative task (N=7)

Items (Agree % vs. Disagree %)	TA		A		PA		DA		TDA	
	N	%	N	%	N	%	N	%	N	%
I like to collaborate with peers in creating the group picture book. (100% vs. 0%)	1	14.3	3	42.9	3	42.9	0	0	0	0
I think I fully devoted myself to the project of group picture book. (100% vs. 0%)	4	57.1	3	42.9	0	0	0	0	0	0
I think English majors were diligent in writing the story. (100% vs. 0%)	2	28.6	3	42.9	2	28.6	0	0	0	0
I think my group members dedicated themselves to group discussion. (71.4% vs. 28.6%)	1	14.3	3	42.9	1	14.3	2	28.6	0	0
I enjoy doing the online group project. (85.7% vs. 14.3%)	0	0	2	28.6	4	57.1	1	14.3	0	0
I feel that I have benefited greatly from the collaborative project. (100% vs. 0%)	2	28.6	3	42.9	2	28.6	0	0	0	0
I feel the task of group picture book is beneficial to my English ability. (71.4% vs. 28.6%)	0	0	0	0	5	71.4	1	14.3	1	14.3
All in all, I like the task of group picture books. (100% vs. 0%)	3	42.9	2	28.6	2	28.6	0	0	0	0

Note: TA= totally agree, A= agree, PA= partly agree, DA= disagree, TDA= totally disagree

Regarding the question- "What do you like most about the group collaborative task?", the top five answers among language students are as follows, creating stories is interesting (70.4%), I can understand others' opinions (66.7%), I can make friends with different majors (48.1%), my classmates and I become closer over the project (44.4%), and my classmates helped correct my English errors (40.7%) (See table 2-1). In contrast, to art students, they liked the task because creating stories is fun (42.8%), they could understand others' opinions (42.8%), and the task increased their self-confidence (42.8%) (See table 2-2).

Apparently, for most of the students it was fun to create stories together with peers. Furthermore, they valued their classmates' opinions and friendship as well. To these freshmen, who probably left home the very first time in their life, having companions or close friends their age is important. Through doing the inter-major online project together, they got to know not only the students on the same campus, but also others on the different campus, which might give participating students even more pleasure.

Table 2-1. Reasons why English majors liked the collaborative task (N=27)

Question	Answers	N	%	Rank
What do you like most about the group collaborative task?	Creating stories is interesting.	19	70.4	1
	I can understand others' opinions.	18	66.7	2
	I can make friends with different majors.	13	48.1	3
	My classmates and I become closer over the project.	12	44.4	4
	My classmates helped correct my English errors.	11	40.7	5
	The task motivated me to learn English.	10	37.0	6
	I can help peers correct their English errors.	6	22.2	7
	The task increased my self-confidence.	4	14.8	8

Table 2-2. Reasons why Art majors liked the collaborative task (N=7)

Question	Answers	N	%	Rank
What do you like most about the group collaborative task?	Creating stories is interesting.	3	42.8	1
	I can understand others' opinions.	3	42.8	1
	The task increased my self-confidence.	3	42.8	1
	I can make friends with different majors.	2	28.5	2
	The task motivated me to learn English.	2	28.5	2
	I can help peers correct their English errors.	1	14.2	3

Even though the majority of English majors enjoyed the collaborative task, the following three situations were cited as negative aspects of the project. The first is the students felt the collaborative task was time-consuming (55.6%). The second is when group members did not equally contribute to the project but still shared the scores of the group project (37%). The third one is when their group members were not diligent enough (14.8%) (See table 3-1). As for art students, being rushed to draw for the story is the most challenging aspect for them (100%), and some were not content with their lazy group members (42.8%) (See table 3-2).

One solution to a largely experienced problem, would be for the teacher to grade each individual student according to his/her individual devotion to the project, rather than assigning a group score. In the last class of the study, the English teacher asked the students to evaluate every group member and explained why they gave such a score. Interestingly, a student, Ming, who was not involved in the group work according to all of his group members' comments, came to the teacher and asked whether he would be failed because he knew his group members gave him "bad" evaluation. When the teacher asked Ming why he did not cooperate with the peers, he replied in low voices that he didn't like to talk to people, and he preferred to do the project individually. He thought his English was not good, and he was afraid that his group members would laugh at him if he made lots of English errors. From the student portfolio provided by the school, the teacher realized Ming had the problem of learning disorder. In order to understand more about Ming, the teacher talked to one of his group members, Ken, who was also his roommate. Surprisingly, Ken was very angry at Ming because Ming had totally ignored the group project. He complained that Ming was addicted to the

online video games and often stayed up late all night. However, when the teacher asked Ken why he did not report Ming’s behavior to her before, Ken said he did not like to be an informer and he thought it is unkind to say some bad words behind people.

The story of Ming and Ken made the English teacher reflect that she should have interfered with the miscommunication between them if she had known the anger of Ken earlier. Nevertheless, on the one hand, since Ming is a learning disabled student, the teacher always tolerated his unusual behaviors in class such as dozing, or frequently using the restroom. On the other hand, due to typical Chinese character, Ken swallowed his anger about Ming in order to maintain the fake group harmony. Probably, both the English teacher and Ken were wrong. Their tolerance did not help Ming to face his problem and as a consequence, his group suffered from this during the collaborative project.

Table 3-1. Reasons why English majors disliked the collaborative task (N=27)

Question	Answers	N	%	Rank
What do you dislike most about the group collaborative task?	The collaborative task took me lots of time.	15	55.6	1
	Group members shared the scores of the group project even though each one did not contribute equally.	10	37.0	2
	My group members were being lazy.	4	14.8	3
	Group discussion was troublesome.	2	7.4	4
	I didn’t learn anything from the task.	2	7.4	4
	Group discussions bored me.	2	7.4	4
	My group members rejected my suggestions	1	3.7	5
	My inadequate English competence made me feel embarrassed.	1	3.7	5

Table 3-2. Reasons why art majors disliked the collaborative task (N=7)

Question	Answers	N	%	Rank
What do you dislike most about the group collaborative task?	The project was completed in a hurry.	7	100	1
	My group members were being lazy.	3	42.8	2
	Group discussion was troublesome.	1	14.2	3
	The collaborative task took me lots of time.	1	14.2	3

Fortunately, the other groups did not suffer from similar unhappy experiences. Instead, the majority of participants believed they gained something from the collaborative task. Students’ answers to the open-ended question- “What are the greatest gains from the collaborative project?” show that a half of the language students were very excited about having their own picture book (see table 4-1). As one student wrote, “I have never made an English picture book in my life. And I can’t believe that we even get it published. How thrilling it is!” Moreover, working with peers is another gain for approximately 20% of the language students. For example, one student said, “It’s very interesting to make a picture book together. I’m so proud of my team. And I greatly enjoy the successful accomplishment of our task.”

As for art students, in addition to creating a picture book (42.8%), trans-disciplinary collaboration (28.6%) and the joy of self-accomplishment (28.6%) were also valued to them (See table 4-2). One student wrote that, “I never knew I can draw so fast. It’s really amazing.”

Table 4-1. English majors’ greatest gains (N=26)

Item	N	%	Rank
Creating a picture book and getting it published	13	50	1
Team collaboration	5	19.2	2
Reading some English picture books	4	15.4	3
Getting to know new vocabulary	3	11.5	4
Understanding my own inadequacy when I compared myself with others	1	3.9	5

Table 4-2. Art majors' greatest gains (N=7)

Item	N	%	Rank
Creating a picture book and getting it published	3	42.8	1
Trans-disciplinary collaboration	2	28.6	2
Realizing I could draw quickly	2	28.6	2

Regarding the students' deepest frustration at the collaborative project, only three English majors gave their answers. It seems that very few students felt dissatisfied with the group work. Among the three students, one student was upset that the length of his/her group story was shorter than that of other groups, probably feeling sorry that his/her group did not work hard enough. Another student expressed that he/she would have liked to be involved more in the project rather than just sitting there and while the group leader did everything. The third student had difficult time in translating Mandarin into English (see table 5-1). In contrast, art students felt frustrated when they had to get the painting task done in a hurry (42.8%), and some were not satisfied with the quality of their own drawing (28.6%). Another student complained that due to the sudden change of the storyline, she had to draw the pictures all over again (See table 5-2). It seems that some miscommunication did happen between language students and art students.

Table 5-1. English majors' deepest frustration (N=3)

Item	N	%
Other groups' stories are longer than ours.	1	33.3
I did not contribute enough, because our group leader had done everything for us.	1	33.3
Translating Mandarin into English was frustrating.	1	33.3

Table 5-2. Art majors' deepest frustration (N=7)

Item	N	%
I was rush to get the painting task done.	3	42.8
My painting quality was not good enough because the given time was not enough.	2	28.6
My team changed the story suddenly when I had almost finished the illustration.	1	14.3
I was not familiar with the drawing software.	1	14.3

Among the ten language students who would make changes if they could do the project again, six students wanted to work harder, three students said they would participate more in the discussion, and one student would revise the story content and make it even better (see table 6-1). As for art students, three students would discuss more thoroughly with their group members, two would complain less, and one wanted to improve her painting skills (see table 6-2).

Table 6-1. English majors' changes if they could do the task again (N=10)

Item	N	%
Work harder.	6	60
Participate more in the group discussion.	3	30
Revise the content of the story and make it better.	1	10

Table 6-2. Art majors' changes if they could do the task again (N=7)

Item	N	%
Spent more time discussing with group members.	3	42.8
Complain less.	2	28.6
Improve my painting skills.	2	28.6

Two language students offered their suggestions about the course. One student suggested that the teacher should not limit the theme of the picture book to the ocean. He/she thought that it would be better to allow students to decide the theme of the picture book. The other student proposed that they should have a chance to preview each illustrator's work before they decide which one to draw for their story according to the painter's painting style.

Finally, eighteen language students left some touching and interesting messages to the teacher. As typical Chinese students would express their appreciation to the elder before they depart, they said “thank you for teaching us”, “to be your student is a blessing”, or “I like your student-centered instruction” (see table 7-1).

Art students offered different suggestions from those of language students (see table 7-2). Apparently, they were more concerned about the way of interaction between group members. Five among seven art students expressed that sometimes it is not clear to communicate through the online media platform LINE. They suggested that group members need to meet face-to-face so that they could clarify their thoughts. Another interesting suggestion is that teachers should arrange two illustrators in one team to provide a sense of belonging and to counter loneliness of the art students. In this study, each group only has one art student. Before the art students started drawing, they had to wait until the language students came up with the story content. Thus, when the language students delayed the production of the story, the illustrators were in a panic trying to finish the project on time. That’s why some art students stressed that it is vital to make a strict timetable for the project.

Table 7-1. English majors’ messages for the teacher (N= 18)

Item	N	%
Thank you for teaching us.	7	38.8
You have been working hard.	6	33.3
I like the student-centered instruction.	2	11.1
Writing the reflections of picture books is difficult, but I think it’s worthy.	1	5.6
Please let me pass.	1	5.6
I want to meet your dog.	1	5.6

Table 7-2. Art majors’ messages for the teacher (N=7)

Item	N	%
In addition to online discussion, group members should meet in person and discuss face to face.	5	71.4
Arrange two painters from the same campus in one team; being alone is very painful.	1	14.3
Give more time to draw for the story.	1	14.3

All in all, the findings of this study are in accord with the results of the previous studies on collaborative learning (Arisa, 2015; Sun, 2017). However, the present study enhances the previous studies’ findings by investigating trans-disciplinary collaboration among two different majors. Transdisciplinary teamwork has been promoted by scholars in educational settings as it reflects real world circumstances and enhances student communication skills. However, there is no denying that working with peers from different majors can cause frustrations to students, in the present case study, particularly to freshman students since they might be lacking in collaborative working experiences at all. Previous studies show that efficient communication and information management are major issues if transdisciplinary work should succeed (Vyt, 2008). Therefore, the quality of team meeting is important. In the present study, the students across campuses could rely on Line messages to communicate with each other. This might hinder further and more thorough discussions among group members. As previous studies pointed out, learners in an online environment may have limited social interactions (Pang, Lau, Seah, Cheong, and Low, 2018). This study suggests that when a group consists of members from different campuses, online communication alone will possibly lead to misunderstanding and reduce the collaboration dynamics.

For transdisciplinary teamwork, there is also a need for a collective code of ethics, that is, a shared complementary responsibility (Vyt, 2018). In this study, several students were not happy about their group members’ contribution to the completion of the learning task. Therefore, this study suggests that effective team coaching is essential. Teachers can play a more active role as supervisor and moderator.

Conclusions

In this study, English majors and art majors collaborated in creating picture books through the social media platform LINE. The majority of the participating students believed this is a successful and pleasant experience. They also enjoyed meeting new friends from different campuses and with different talents. However, while most students valued the collaborative task, some students might feel dissatisfied when their group members did not devote themselves to the task, or when someone in the group was reluctant to listen to others' opinions. Due to Chinese character, many students may hide their dissatisfaction with their peers for the sake of group harmony. Therefore, the teacher should join each discussion group, monitor the process of collaboration, and pay special attention to the situation if there is disagreement between group members. It will be even better if the teacher could advise students some strategies to communicate or negotiate with their classmates before they participate in the task. Finally, to encourage the social interactions among group members, teachers could arrange learners with different majors to meet in person. Thus, learners may have better communication and then finish their project even more smoothly.

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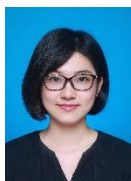
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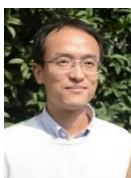
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Is SET system effective in promoting EFL learners' speaking proficiency? Evidence from a longitudinal study

Bio data



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Abstract

This study aims to explore, from a longitudinal perspective, the effectiveness of using a responsive spoken-English training (SET) system in oral English teaching and learning for EFL students in China. The system, based on automatic speech recognition (ASR) and deep neural networks, is a popular SET app that is capable of rendering immediate corrective feedbacks on different facets (accuracy, fluency and completeness) of speaking performance. Two groups of freshman students, who enrolled in the same spoken English course, were invited to participate in the study that lasted for one academic year. Students from the experimental group were required to finish various types of oral tasks with the SET app, while their peers in the control group were assigned to accomplish similar tasks by recording themselves and submitting the recording to their instructors. Upon the completion of the course, all participants were directed to finish a questionnaire on their perceived usefulness, attitude towards using. Results revealed that the integration of SET application in the course is positive in improving spoken-English proficiency. To be specific, students from the experimental group outperformed their counterpart in the control group in spoken activities such as read aloud, listen and retell, role play. We therefore argue that, based on the findings of this study, the application of computer-assisted language learning technology (SET system in our case) has helped to elevate students' effective access to individualized spoken-English tutoring opportunities.

Keywords: spoken English training; ASR; CAPT; longitudinal exploration

Conference paper

Introduction

The advancement of machine learning and big data has made possible the large-scale personalized oral English training based on machine, which has triggered the development

and widespread application of the spoken English training (SET) systems in the foreign language education field. In the traditional spoken-English classroom, given the large number of students in one class, it is impossible for teachers to give prompt corrective and responsive feedbacks to every student.

However, with the use of SET systems, not only more opportunities are given to students to practice in and beyond class, but also detailed feedbacks in terms of pronunciation, fluency and completeness can be gained instantly. Students' motivation of learning has proved to be largely promoted and satisfactory improvements have been reported.

The SET systems, in general, are the integration of technologies such as automatic speech recognition (ASR), computer assisted pronunciation training (CAPT), machine learning (ML) and learning management system (LMS). Targeting at assisting verbal language training and providing diagnostic assessment, these systems have been welcomed by both EFL learners and teachers.

Previous research has investigated the use of SET and alike systems in various contexts. One line of research in the area is the design and development of ASR and CAPT systems in various forms (Doremalen et. al., 2016; Neri, Cucchiarini, & Strik, 2001; Warschauer & Healey, 1998; Zhao, 2003). Another line of research focuses on using ASR and CAPT systems as a means of verbal language assessment (Litman, Strik, & Lim, 2018; Sabu & Rao, 2018).

Despite the widespread adoption of SET systems in recent years, to our knowledge, whether these systems are effective in promoting EFL learners spoken proficiency remain largely unidentified. To this end, the current study aims at validating the effectiveness of SET systems in spoken English teaching and learning by means of experiments, which lasted for two semesters.

The following research question guides the present study: Is the SET system effective in promoting EFL learners' speaking proficiency in the longitudinal perspective?

Method

Participants

A total number of 105 participants were recruited from a university located in southwest of China, they were all non-English major freshmen students. The data shown in Table 1 indicated that both the control group and experiment group are similar in terms of the demographic features such as population, the ratio of genders and age in average.

Table 1. Demographic statistics of the subjects

	Population	Male	Female	Age in average (Years)
Control Group	53	14	39	20.17
Experiment Group	52	12	40	20.41

The SET system

The FiF spoken-English training system, based on automatic speech recognition (ASR) and deep neural networks, is a popular SET app that is capable of rendering immediate corrective and responsive feedbacks on different facets (accuracy, fluency and completeness) of speaking performance. In addition to its broad application in over 1,000 schools and universities across China, FiF has been officially adopted as the spoken-English assessment application by the National College Entrance Examination in Guangdong province in 2013 and the College English Test in 2015 nationwide.

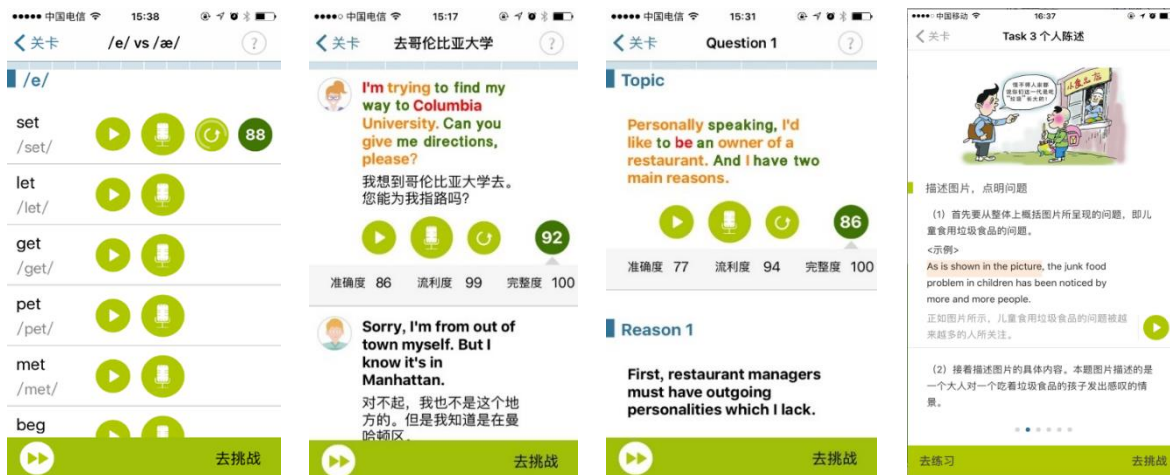


Figure 1. Screenshots of various spoken-English activities in the FIF app in smartphone

Design

All the participants attended a compulsory spoken-English course that lasted for 32 weeks (two semesters) with two in-class sessions per week. Prior to being assigned into a specific class (group), all the participants were required to take a spoken-English placement test. For students in the experiment group, they were required to finish various types of oral tasks with the SET app, while their peers in the control group were assigned to accomplish similar tasks by recording themselves and submitting the recording to their instructors. The participants' performance in the given tasks was automatically evaluated by the SET app for the experiment group, while that of the control group was manually judged by two instructors. Before the experiment, two experienced independent instructors were trained to score the spoken performance of the sample recordings. The mean of their scoring results were compared with that of the automatically generated score based on the same sample recordings by the SET system. Statistics ($r = 0.902$, $p = 0.000$) showed that significant correlation was found between the human and machine scoring. For the experiment, six spoken tasks were given at the beginning, in the middle and at the end of each semester respectively (see Table 2 below). That is, three oral tasks were assigned in each semester. All the tasks were evaluated in terms of pronunciation, fluency and completeness.

Table 2. List of spoken-English tasks

Task #	Semester	Task description	Quantity of questions
1	1	Listen and repeat (words)	30
2	1	Listen and repeat (sentences)	10
3	1	Oral dictation	10
4	2	Role-play reading	5
5	2	Listen and repeat (paragraphs)	2
6	2	Picture description	1

Instruments

A follow-up 7-point Likert scale survey (see Table 3 below) on the perceived usefulness and attitude towards using was issued to all the participants in the experiment group at the end of the second semester. Reliability test showed the coefficient was .87, indicating that the items in the survey have high internal consistency.

Table 3. Questionnaire on the perceived usefulness and attitude towards using of FiF

Construct	Item	Values (1-7)	Item references
Perceived Usefulness	1. FiF is useful to assist me in speaking.		Huang (2016)
	2. FiF is useful to assist me in speaking fluently.		
	3. Using FiF, I can speak much better.		
Attitude Toward Using	4. I like using FiF to assist me in speaking.		Huang (2016)
	5. I think using FiF is a good idea.		
	6. I think that FiF makes speaking English more interesting.		

Results & Discussions

The descriptive statistics of the spoken-English placement test are presented in Table 4. From the statistics, the score values of the control group and experiment group are similar in terms of mean, standard deviation, maximum, and minimum. The findings are self-evident in that spoken performance of the control group and experiment group in the placement test is comparably close. An independent samples test ($F = 11.021, p = 0.432$) also found no significant difference between the control group and experiment group.

Table 4. Descriptive statistics of the spoken-English placement test

	Mean	Median	S.D.	Max	Min
Control Group	72.54	74.66	6.33	80.66	56.00
Experiment Group	71.72	72.00	4.16	78.67	60.67

The results of each assessing aspects such as pronunciation, fluency and completeness were plotted in Figures 2 to 4. Participants from the experiment group scored higher in almost all aspects except completeness in the 4th task. This significant difference can be accounted for by the immediate responsive and corrective feedbacks provided by the SET system. On the contrary, participants in the control group were less involved in such kind of interaction.

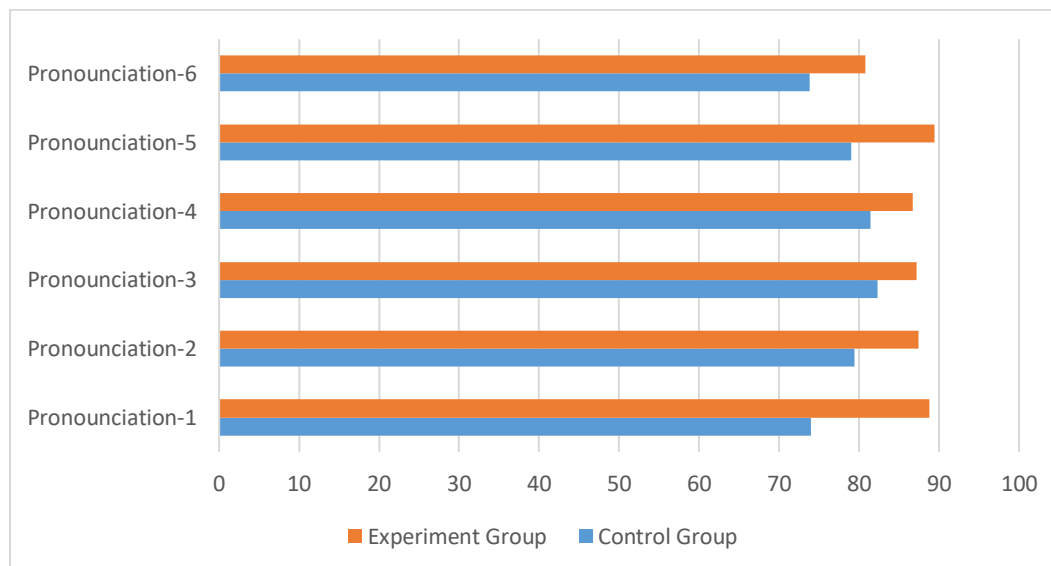


Figure 2. Results of pronunciation in the six tasks

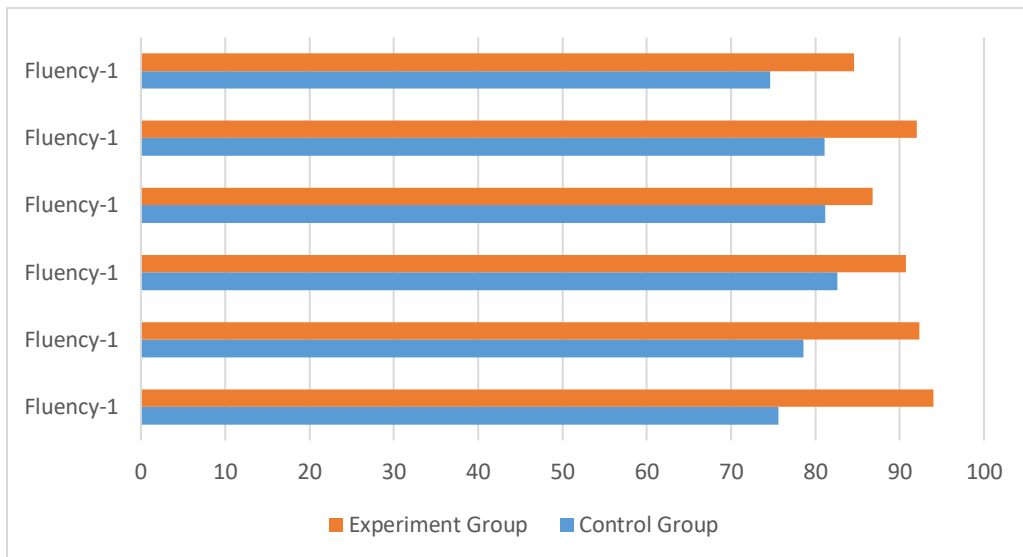


Figure 3. Results of fluency in the six tasks

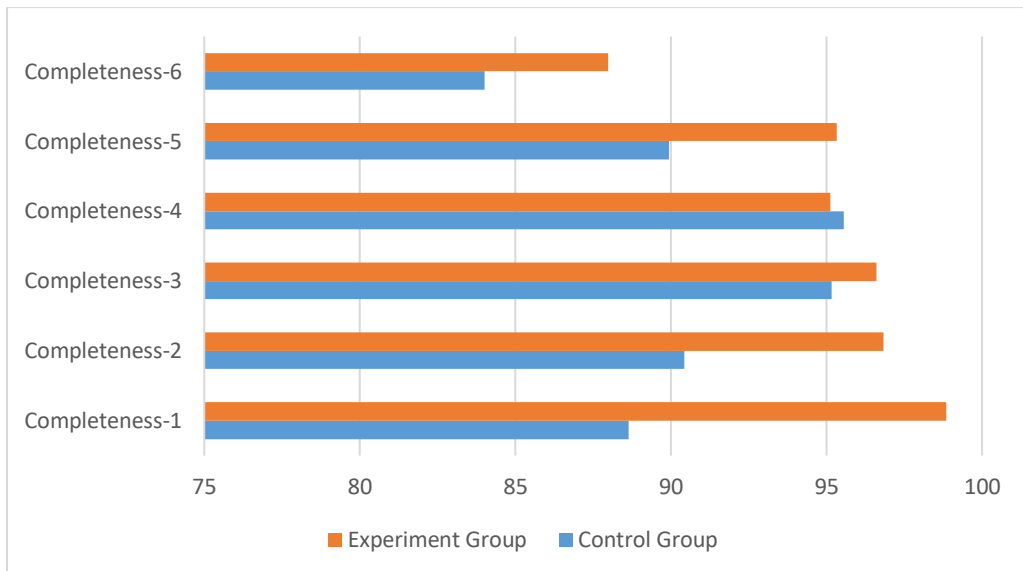


Figure 4. Results of completeness in the six tasks

After 32 weeks, as shown in Figure 5, the overall score of participants in the experiment group outrun their peers in the control group. Besides, the time (see Figure 6 below) that the experiment group spent on these tasks are long than that of the control group, indicating participants in the experiment group are more like to 'interact' with the SET system to improve their results.

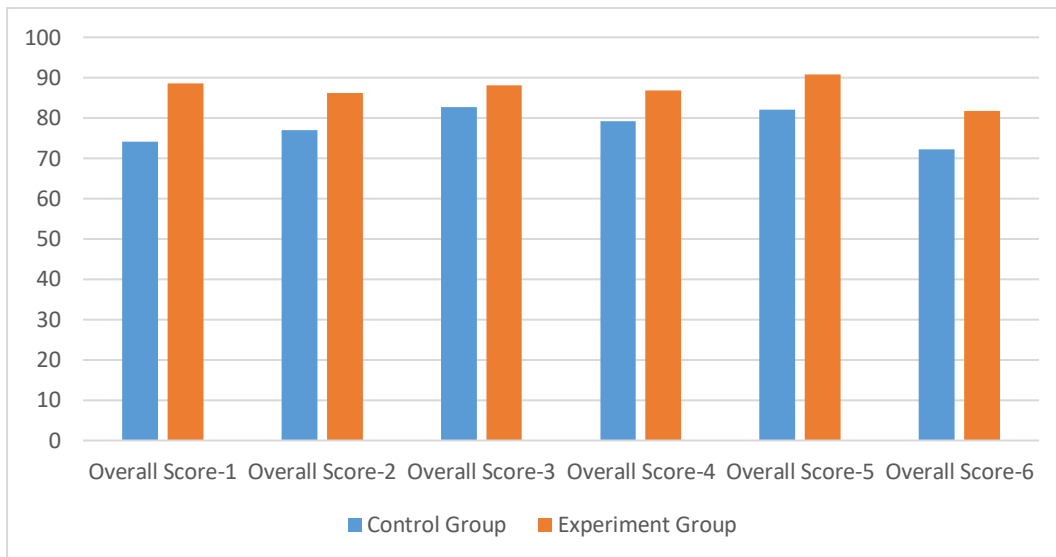


Figure 5. Results of overall scores in the six tasks

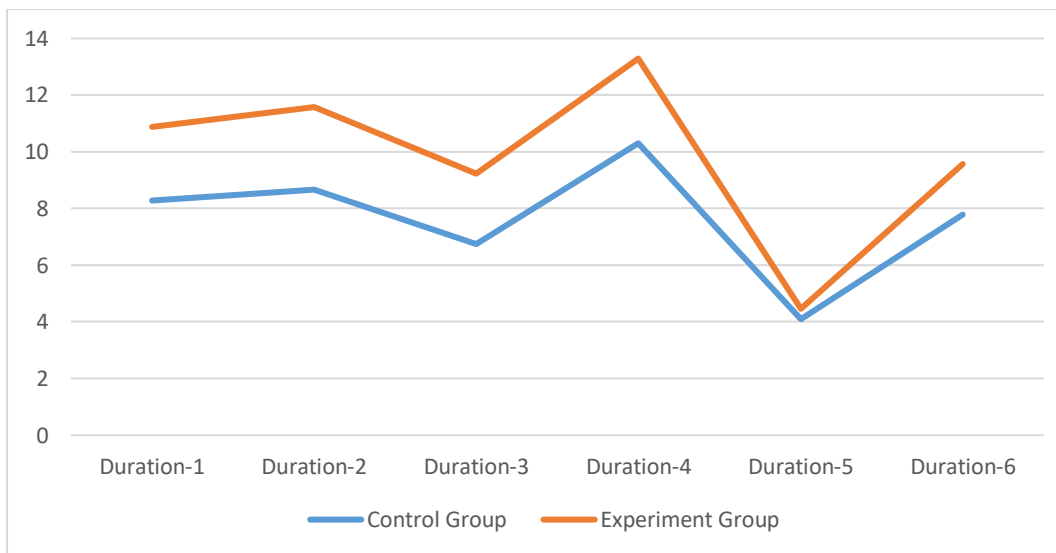


Figure 6. Statistics of the time spent in the six tasks

The results of the follow-up questionnaire indicated that most participants in the experiment group were positive in using SET apps such as FiF in the study of spoken English. (see Figure 7 below)

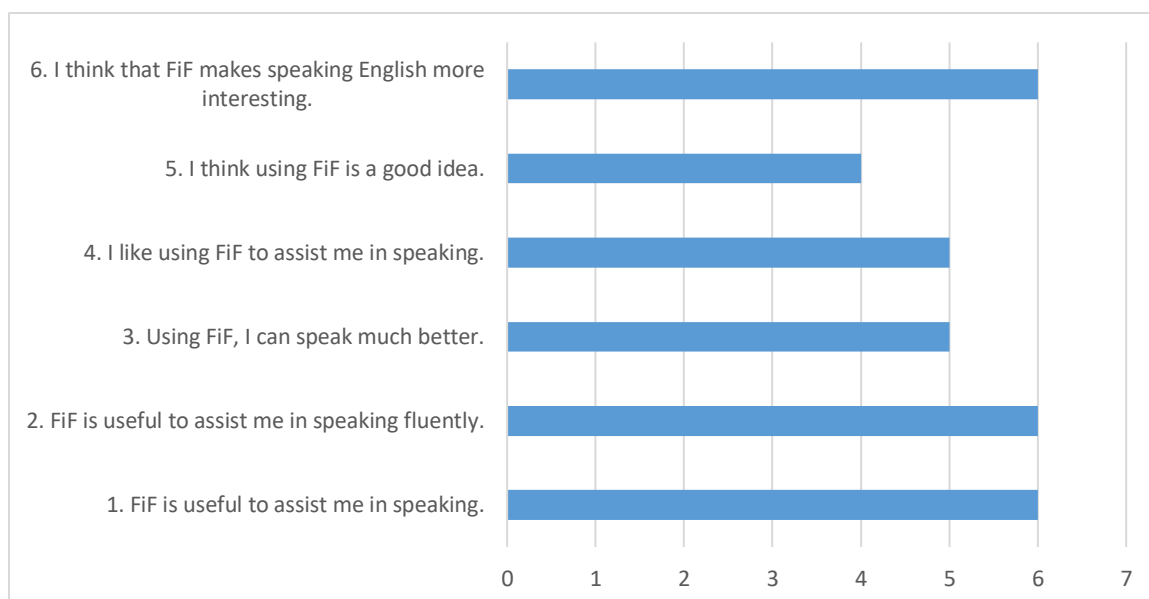


Figure 7. Statistics of the follow-up survey

Conclusion

The spoken-English training systems has made individualized tutoring in oral English training a possibility, with prompt corrective and responsive feedbacks, EFL learners are empowered with abundant opportunities of verbal interactions, which otherwise, would not be possible in real pedagogical practice. This longitudinal study, enduring for 32 weeks, provided empirical evidence of the usefulness and effectiveness of adopting SET technology in assisting and promoting verbal language learning. Future studies may consider enlarge the population of participants, and extend duration of the experiment into more than two semesters.

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Virtual rReality simulations: a medium for promoting pedagogical interactions among teachers in an intercultural telecollaborative project

Bio data



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Paige Ware is Professor in Education at Southern Methodist University. Her research focuses both on the use of multimedia technologies for fostering language and literacy growth among adolescents, as well as on the use of Internet-based communication for promoting intercultural awareness through international and domestic online language and culture partnerships.

Abstract

This intercultural telecollaborative project explores the types of learning opportunities that Virtual Reality Simulations (VRS) can provide for pedagogically rich interactions among teachers from different cultural and linguistic backgrounds. The VRS, a new technology, allows participants to teach three human-augmented avatar ESL students in real time. Participants include three experienced language teachers in Taiwan and two experienced language teachers in the U.S. They taught individual ten-minute lessons in the VRS and met in real time over Zoom to compare and contrast their teaching; they then co-planned, co-taught a 30-minute lesson, and discussed their teaching. Multiple data sources were collected: video recordings of VRS teaching, teacher written reflections, Zoom video recordings of teachers' co-planning and debriefing conferences, and lesson plans. Preliminary findings reveal that VRS mediated the development of a pedagogical "third space" for teachers across cultures (Kramsch, 1993; Skerrett, 2010). The teachers tended to refer to teaching moments of high cultural interest and such teaching moments triggered their critical analysis of cultural inflection points in the videos. Further, the teachers'

conversations led to their discovery of similarities and differences in their teaching beliefs and practices, and directed their attention to implicit values in the teaching acts.

Conference paper

This presentation reports on an intercultural telecollaborative project exploring the types of learning opportunities that Virtual Reality Simulations (VRS) can provide for pedagogically rich interactions among teachers from different cultural and linguistic backgrounds. The VRS in this project involved a new technology that allows participants to teach a small group of three human-augmented avatar children in real time. The avatar children were animated by a human "simulation specialist" trained to enact five profiles of 13-year-old, intermediate level ESL students (Driver, 2018; Murphy, Cash, & Kellinger, 2018; Schott & Marshall, 2018). The use of VRS echoes O'Dowd's (2016) call for telecollaborative tasks with higher-level authenticity in order to promote authentic social interaction and intercultural awareness of learners, which also in turn, allows the explorations of the VRS affordances in a telecollaborative project. Its integration contains the potential, as an expanded approach to conventional telecollaboration, of providing more revealing insights on the social impact of telecollaboration on the intercultural learning of teachers.

In a three-phase approach, participants exchanged information about themselves, and their teaching beliefs on Padlet; they made and enacted individual ten-minute VRS lessons; they then met in real time over Zoom after watching one another's recordings to discuss their own teaching; finally, they co-planned and co-taught a 30-minute lesson in the VRS, followed with a discussion about their teaching via Zoom. This three-phase approach reflects the task types and sequence described by O'Dowd and Ware (2009) of information exchange, comparison, and collaboration. Therefore, in using this socioconstructive lens to ground a task-based learning approach to the project design, we positioned the teachers to enhance their critical thinking about pedagogies and intercultural communication by teaching, reflecting, and co-teaching across linguistic, cultural, and geographic lines (Belz, 2002; Byram, 1997; O'Dowd & Ware, 2009).

We explored within this new type of telecollaborative tasks—teaching in a VR simulation, reflecting, and then co-teaching—how teachers performed and produced teaching events that became the context for intercultural social conversations grounded in concrete instances of pedagogical decision-making. Participants include three experienced language teachers (elementary school teachers enrolled in a M.A. program) in Taiwan and two experienced language teachers (who are studying for a doctoral degree in education) in the U.S. They were formed in two groups of two/ three intercultural partners to (co-)plan and enact lesson plans; observe video recordings of their teaching to make comparisons and analyses; reflect on their teaching practices; and interact to understand each other's instructional beliefs and decision-making in language and culture teaching. These interactions took place using multiple online tools (i.e., Padlet, email, Google docs, Zoom), primarily using Zoom, a synchronous videoconferencing tool.

Data were collected from four sources: video recordings of participants' VRS teaching practices, written reflections, video recordings of participants' co-planning and debriefing on Zoom video conferences, and teacher-made lesson plans. The analytical lenses included Gee's (2011) discourse analysis tool of intertextuality and the two dimensions of Bryam's (1997) intercultural communicative competence framework (skills of discovery and interaction, critical cultural awareness). The data were analyzed to understand the following: 1) the types of intertextuality functions the teaching events produced via the platform of VRS for the enrichment of pedagogical conversations, which reflect the types of opportunities the VRS provides for pedagogically rich conversations among the teachers, 2) the mediated roles the VRS exhibits in the teachers' development of discovery and interaction skills as well as their critical cultural awareness, 3) ways in which the conversations about instructional practices and teaching goals share common threads

across different language education contexts. Data analyses were conducted as an iterative process with alignment along the protocols established in grounded theory case study qualitative research (Miles, Hubermann, & Saldana, 2019). Open coding of the transcripts of all text-based and transcribed files of video recordings will take place using qualitative analysis software (NVivo12) to develop a coding system, followed by two independent raters using the coding system with a goal to achieve interrater reliability of 80% or higher.

Preliminary findings reveal that VRS mediated the development of a pedagogical “third space” for teachers across cultures (Kramsch, 1993; Skerrett, 2010; Helm, Guth, & Farrah, 2012). It enabled them to engage in teaching events that functioned as “significant reference sources within and across cultures [to] elicit their significance and connotations” (Byram, 1997, 53). The teachers tended to refer to teaching moments of high cultural interest, and the teaching events triggered their critical analysis of cultural inflection points in the videos. The teachers’ conversations led to their discovery of similarities and differences in their teaching beliefs and practices, and directed their attention to implicit values in the teaching acts. In terms of the ways the teachers shared common threads in their instructional practices and teaching goals, the analysis of their pedagogical conversations showed three major patterns: a) both teachers in Taiwan and teachers in the U.S. valued the input from intermediate ESL students and showed high-level awareness to purposefully use strategies to elicit responses from them, particularly their open-ended responses, b) the teachers from both educational settings designed and enacted lessons focused on objective goals for the intermediate ESL students to master conceptual understanding of a topic and develop their language skills, and c) the teachers tended to compromise instructional time for cultural learning to the development of content and language due to the pressure to address the expectations of high-stake testing and their tendency to stick to original lesson plans and avoid the lesson flow being disrupted in order to ensure the lesson objectives to be fulfilled, which was particularly salient when moments of cultural inquiries or disagreement arose among the ESL students from diverse cultures. In general, the teachers’ knowledge base (especially in pedagogical and cultural dimensions) broadened and their critical cultural awareness increased as they continuously analyzed and reflected on their instructional decisions across international contexts. Based on the findings, the presenters will provide suggestions for the integration of virtual reality simulations into a telecollaborative project to enrich teachers’ intercultural learning experience and prepare them to become interculturally sensitive educators.

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Facilitate Autonomous learning of Chinese language with social media enhanced pedagogy**Bio data**

Lisha Xu specializes in teaching Chinese as a foreign language. Her research interest is technology-assisted Chinese language learning. She conducted several research projects on online listening and extensive reading, technology-assisted vocabulary acquisition and teaching, and integrating blended learning approaches. Her publications include a co-authored textbook and two short papers on EUROCALL 2017 and WorldCall 2008.

Abstract

Reinhardt (2019) concluded autonomy is the key to achieving the goal of lifelong second language learning (p.26). Lai (2017) noted that "autonomy is an important component in successful language learning, and it can occur in both formal and informal contexts" (p.1). Scholars argued networked digital technologies enable language learners to express autonomy through collaborative and individualized language learning (Tim, Marco, Annick Rivens, 2017, p1). Studies have explored the use of digital technologies and the impact they have on second language learning and learner autonomy (e.g., Dizon & Thanyawatpokin, 2018; Hamada, 2012; Wang & Li, 2017). Yet quite a few studies have focused on autonomous Chinese language learning with technology out of a classroom. Thus, the aim of this study was twofold: 1) to examine the effectiveness of social media as a pedagogical method to support self-directed Chinese learning beyond the classroom and bridge in-class instruction to out-of-classroom learning, and 2) to understand the nature of autonomous Chinese language learning with technology among learners in three proficiency levels for in-depth exploring of aspects that the instructor can support.

Keywords: Social Media, Chinese language learning, Learner Autonomy

Conference paper

Introduction

Current discussion among Chinese language instructors/scholars focuses on adopting digital technologies as a pedagogical method to promote out-of-classroom learning. One of the goals of self-directed learning is the "promotion of emancipatory learning and social action" (as cited in Lai, 2017, p.18). Peeters and Ludwig (2017) claimed that the rapid development of social media in recent years developed approaches for learner autonomy that "highlight the social and collaborative dimension" (p.115). The current study examines the pedagogical practices involving social media tools, WeChat (SNS) and blog, to teach Chinese language learners at novice, intermediate, and advanced level. These practices aim to encourage learners' participation in both collaborative and individualized language learning activities synchronously and/or asynchronously to facilitate autonomous learning of Chinese and to support the rapid development of Chinese language skills in reading and writing.

This paper first reviews available research in the field of autonomous language learning and digital technology practices, which highlights theoretical models, ways to develop

learner autonomy in language learning with technology and the role of social media in achieving language-learning proficiency. Then it presents the pedagogical design of adopting WeChat and blog to encouraging learner autonomy and addresses the research from the perspectives of learners to identify potential opportunities of applying social media in teaching and learner behavior in practice. Lastly, the paper discusses and provides recommendations on pedagogical practices enhancement.

Literature Review

Autonomous language learning with digital technologies beyond the classroom

Lai (2017) stated the learning context influences autonomous learning with technology beyond the classroom (p.14). Chik (2018) argued that the digital era expanded the affordances of foreign language education, and the learner should have "the competence to manage the learning and understand learning needs" (p.88). Nonetheless, scholars stated that instructors play an essential role to engage students in using technology autonomously in learning. For that reason, instructors are crucial in socially mediating learner autonomy in and out of the classroom (Lai, 2017, p.116). This leads to the question: How can educators support autonomous language learning with technology beyond the classroom? Lai (2017) highlighted several theoretical models and proposed a theoretical framework to help educators understand and facilitate the development of autonomous learning of language with technology. The theories and models include "technology adoption models" (p.37), "self-regulated learning models" (p.41) and "Hubbard's CALL learner-training principles" (p.44). The models stress that: 1) learner's psychological factors and contextual characteristics are key factors influencing autonomous learning with technology; 2) learner's motivation and strategies should be assessed to increase learner's awareness of individualized learning and to involve in autonomous learning of language; 3) technologies and resources should be carefully selected and integrated into the curriculum to meet pedagogical needs and benefit developing specific language skills; 4) learner's autonomy, experiences, and behavior interact with technology in bi-directional ways in the learning process. Therefore, these frameworks provide support to learners in multifaceted dimensions. Lai (2017) pointed out that it is important to foster autonomous learning by supporting self-directed learning outside the classroom and bridging in-class instruction to out-of-class learning (p.118).

Social media: blog and social networking

Reinhardt (2019) argued formal and informal use of social media in second and foreign language teaching and learning could create meaningful social interactions, and this method of digital communicative practice has been integrated into teaching methods (p.4). The review also emphasizes the impacts of social media have on language learning, including it facilitates "meaningful interaction for language learning in authentic discourse communities" (as cited in Reinhardt 2019, p.4). By doing so, this "allowed individual expression through homepage authoring and participation in cyber-communication not bound by physical and temporal immediacy" (as cited in Reinhardt 2019, p.5). It provides a learning environment with the nature of "dynamic, networked, multimodal, and multi-node" (as cited in Reinhardt 2018, p.5). Lai (2017) argued that the various contexts that technology provides would motivate learners to tune to learning opportunities and thus increase their autonomy (p.25). Furthermore, social network theories offer insights into the influence of social media on autonomous language learning, such as providing guidance and advice and a platform for sharing and clarifying of the learning process (Lai 2017, p.40).

Blog

Research on blog-enhanced language teaching and learning argued that blog-based tasks should support and develop learner autonomy because of creating networked communities of writers and readers and providing unique affordances for writing as a social practice" (Reinhardt 2019, p.5). Despite the "novel and convenient nature" of technology, studies found limitations because of "focusing on formal learning tasks rather than the blog-enhanced quality" may restrict learner autonomy (as cited in Reinhardt 2019, p.9). But in Sun's (2012) study, learners were motivated to freely express themselves in blogs by

emphasizing content over accuracy. Moreover, research on autonomy in a collective blog (Daniela, Kathleen, and Marco, 2017) found that autonomy naturally takes on a social dimension because the members posted to talk to the community by pooling what they have learned and providing support to each other.

Social networking

Scholars argued that because SNSs are now integrated with mobile technology and have functions like chatting and messaging, photo posting, multimedia sharing, it can "facilitate the development of collaborative and participatory learning communities, as well as opportunities for informal and unstructured learning" (as cited in Reinhardt 2019, p.25). The research found that multimodal resources like stickers and memos also provide the scaffolding to use the target language to benefit the lower proficiency learners (Reinhardt 2019, p19). Researchers supported "the hypothesis that giving learners a sense of control is key to developing autonomy" in promoting autonomous learning with SNS support, and suggest "unsanctioned quality of the informal group afforded the learning of interpersonal language not possible in the formal group" (as cited in Reinhardt 2019, p.25). Hamada's study (2012) found that Facebook could be a tool to enhance interaction and learner autonomy. Peeters and Ludwig's study (2017) proposed a model on peer collaboration through social networking, indicating social networking can support learner autonomy because it facilitates dialogue and negotiation. Meanwhile, the research also suggested that learners might resist learning with SNSs if "the task is required and imposed top-down" (Reinhardt 2019, p.26). The research (Katerina, Anthippi, Filio, 2017) also echoed that "formal learning environments somehow failed to enhance autonomy development in a natural, learner-driven, self-initiated way, and being autonomous is a stance that needs to be individually experienced to be socially enacted" (p.163).

Pedagogical Design

The essential factor of the pedagogical design is to enhance the in-class learning outcome by fostering and maintaining learner autonomy using social media tools outside of class. The social media tools used were a Wordpress blog and WeChat. WeChat is the most commonly used text and voice-messaging app among Chinese people. It is also capable of photo and article sharing, mobile wallet, RSS feed, finding people nearby, QR codes reading, eCommerce buying and selling. Incorporating WeChat in Chinese language learning allows learners to connect with their tutors and Chinese friends, creating a community with opportunities to practice Chinese autonomously outside of the classroom and maintain learner autonomy. The pedagogical design was guided by the principle proposed by Lai (2017) that focuses on incorporating technology recourses in the out-of-class learning contexts to bridge in-class and out-of-class learning (p.156).

In the semester of Spring 2019, the instructor taught three Chinese language courses: First-year Chinese II, Second-year Chinese II, and Fourth-year Chinese (Learning Chinese through Films). At the beginning of the semester, three closed class WeChat groups and three closed class blogs were created to support the learning outside the classroom in reading and writing through frequent commentary by the instructor and classmates. The objective of these social network platforms was to promote interactive readership and to develop a sense of authority. The learners were also encouraged to express themselves in multimodal composition and digital storytelling.

The instructor posted different discussion topics in the WeChat groups along with the classroom learning to encourage students to use the language out-of-classroom. The learning resources links, such as songs, short video clips, and movies, were also provided in three WeChat groups to support self-directed learning and foster learner's autonomy. On the other dimension, the class WeChat groups were served as the platforms to involve students in non-formal learning with daily life conversations using Chinese in dynamic and multimodal contexts to promote learning motivation.

For using the blogs in language learning, first-year Chinese and second-year Chinese students were provided a topic related to each textbook chapter and required to make a

post in the various formats, such as text, picture, audio or video about personal stories or ideas related to the topic learned in the class. The students in the fourth-year Chinese class were asked to post a story of each movie watched after in-class vocabulary learning intending to facilitate vocabulary understanding, production and retention. Additionally, the fourth-year students were required to post movie clips and stories, a movie review, and a report in the format of the text to discuss Chinese movie and society at the end of the semester. The blogging required 150-200 words for first-year students, 250-350 words for second-year students, and 400-1000 words for fourth-year students.

In regards to providing feedback on posts and chats, the instructor commented on each blog post to make corrections for all first and second-year students and commented on some blog posts to make corrections for fourth-year students. Rather than pointing out errors in WeChat group chats, the instructor responded to messages by using correct grammar and language structure to encourage learners to adopt Chinese in their daily conversations. All learner's posts were included in their final semester grade.

The Current Study

By investigating the practices of integrating WeChat and blog activities into Chinese language learning, the study seeks to answer three research questions: whether these practices helped learners develop autonomy in Chinese language learning?; whether these practices helped learners to improve reading and writing skills?; and does autonomy motivate learners in different proficiency levels using social media in Chinese language learning?

Method and procedure

The participants of the study were 39 students (38 females and 1 male) from three levels of Chinese language courses at Mount Holyoke College in the semester of Spring 2019, including 22 students from first-year Chinese, 12 students from second-year Chinese, and 5 students from fourth-year Chinese. Among them, four first-year students, one second-year student, and one fourth-year student are heritage learners, two are Koreans, one is Vietnamese, and one is Turkish.

During the semester, the instructor recorded all communications on WeChat groups by phone screenshot, and categorized monthly conversations from January 2019 to April 2019 and classified all blog posts and comments by topics. I administered a questionnaire at the end of the semester to collect information about learner's experience. The questionnaire comprised of 5 multiple choice questions about how frequently learners used social media tools, what tools they preferred for language learning outside of the classroom setting, and whether learners participated in WeChat and blog activities. Additionally, 4 open-ended questions inquired for reasons why learners did not engage in online activities, and 9 questions were in the format of a five-level Likert scale where 1 represented "strongly disagree" and 5 presented "strongly agree" to perceive learners' attitude towards the autonomous Chinese language learning using WeChat and blog. Of the 39 students, 34 students responded to the questionnaire: 5 fourth-year students, 18 first-year students, and 11 second-year students.

Data analysis and results

At the end of the semester, the instructor reviewed the screenshots of WeChat groups and the records on the blogs.

Table 1 Summarizes the blog activities of three classes.

Class	Number of students	Topics	Blog posts	Blog Comments by the instructor	Blog Comments by classmates
First-year Chinese	22	7	117	115	70
Second-year Chinese	12	8	69	69	23
Fourth-year Chinese	5	11	52	17	11

Table 2 Summarizes student number in class and WeChat group.

Class	Student number in class	Student number in the WeChat group
First-year Chinese	22	16
Second-year Chinese	12	11
Fourth-year Chinese	5	3

Table 3 Summarizes the WeChat log of three classes.

	First-year Chinese	Second-year Chinese	Fourth-year Chinese
Month	Screenshots of the posts	Screenshots of the posts	Screenshots of the posts
January	1	15	0
Feburary	12	8	2
March	0	10	2
April	8	5	1

The results for 5 multiple choice questions about the nature of autonomous language learning with social media are as follows:

Figure 1: Question1 What social media tools do you use for language learning out-of-classroom? Please check all that applied.

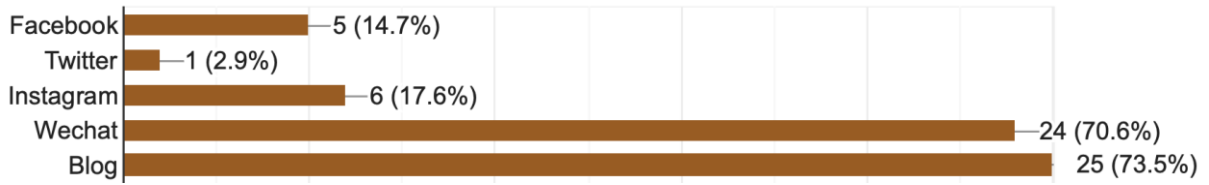


Figure 2: Question 2 How often do you use social media in your language learning?

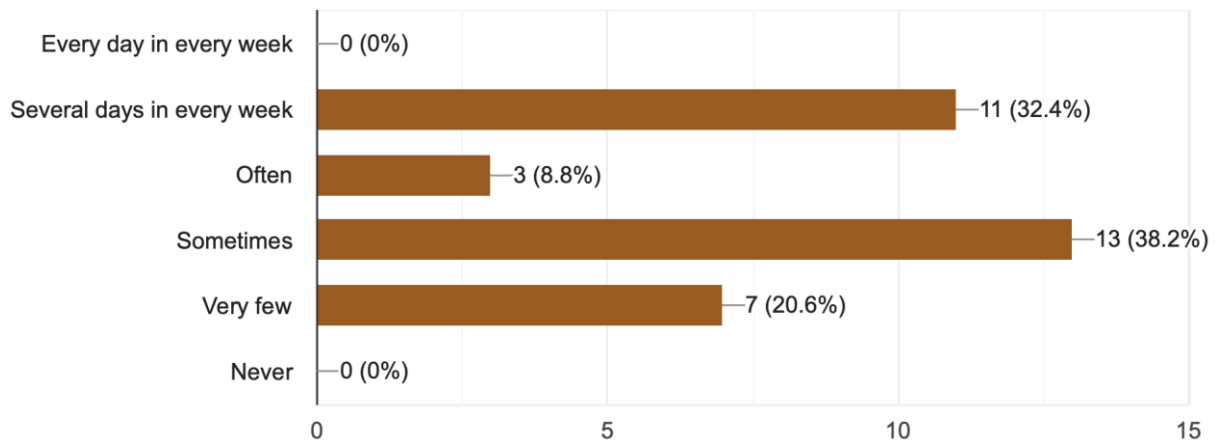
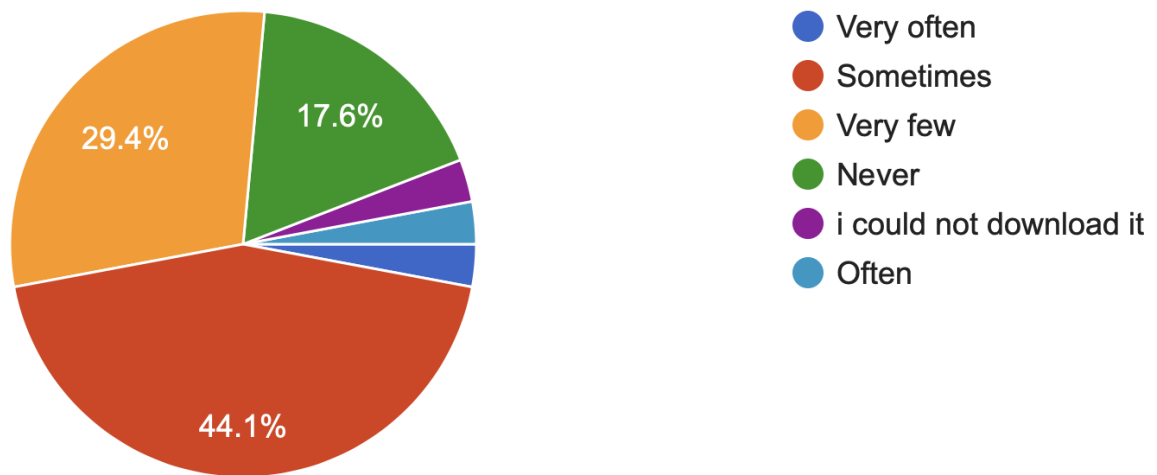


Figure 3: Question 3 In the Spring of 2019, the instructor involved WeChat in Chinese learning in an informal



learning context. How often did you participate in chatting with classmates in Chinese out of classroom autonomously?

Figure 4: Question 4 In the Spring of 2019, the instructor involved blog in Chinese learning in a formal learning context. Did you post as required?

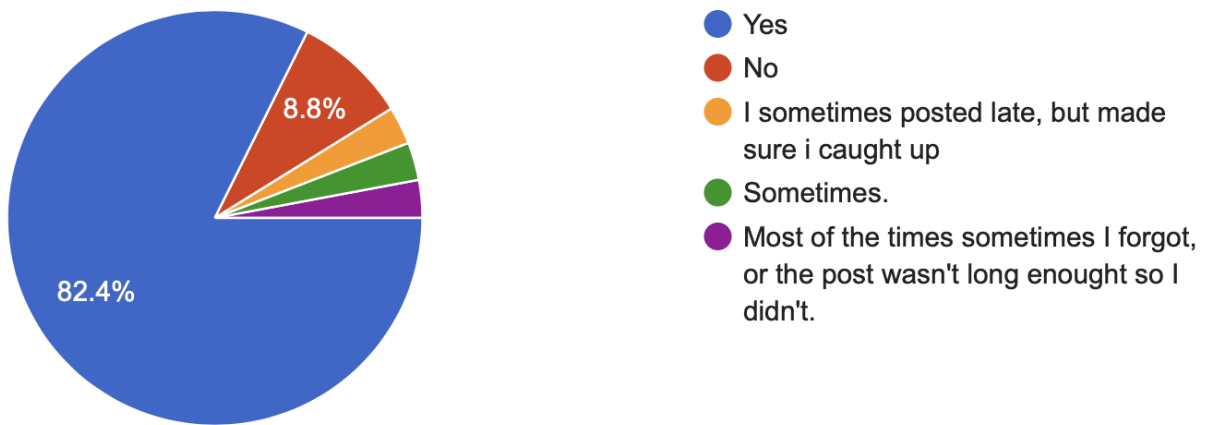
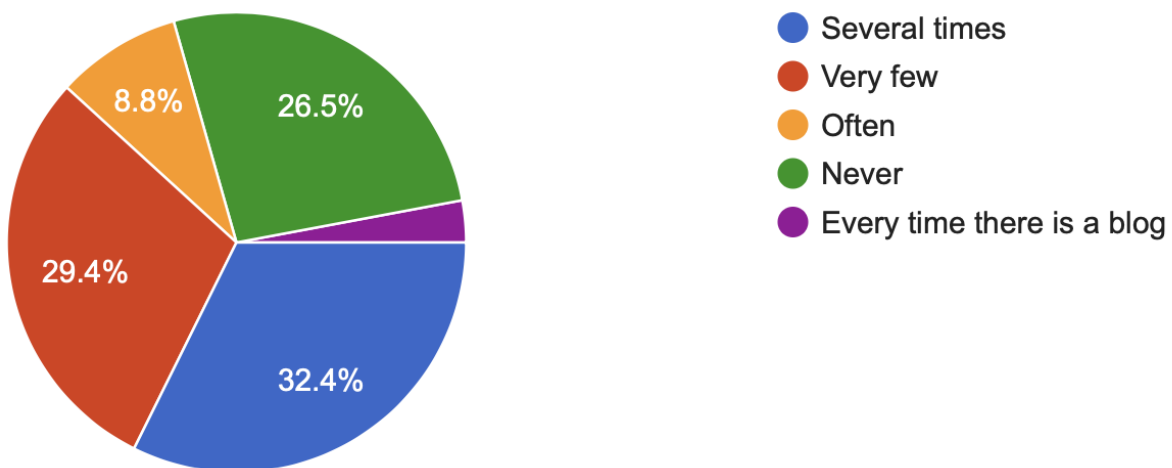


Figure 5: Question 5 Did you comment on other classmates posts?



For the open-ended questions that inquired about reasons why learners did not post and comment on the blog, did not participate in WeChat discussion, or only engaged in a few, students cited they were too busy to join the activities as the main reason for their lack of participation. For the first-year students, there were several statements I would like to include: "There were times when I was unsure how to respond, and felt awkward putting in an incorrect sentence to the group [chat]. Although I understand that it is good practice, and could have possibly corrected the mistakes I was worried about."; "I felt intimidated by the group chat because everyone could see my posts, but I would text with my native Chinese speakers occasionally."; "I didn't really feel the need to use it unless there was a prompt that the instructor put up on WeChat. Also, in general, I don't have much to say."; "I did not feel confident in my own grammar knowledge, so I was unsure of what to comment on other students' posts."

The results for 9 questions to perceive learners' attitude towards the autonomous Chinese language learning using WeChat and blog are as follows:

Figure 6: Statement 1 Non-formal learning with daily life conversations using Chinese on WeChat with dynamic and multimodal contexts promote learning motivation. One student in the first-year class checked "disagree."

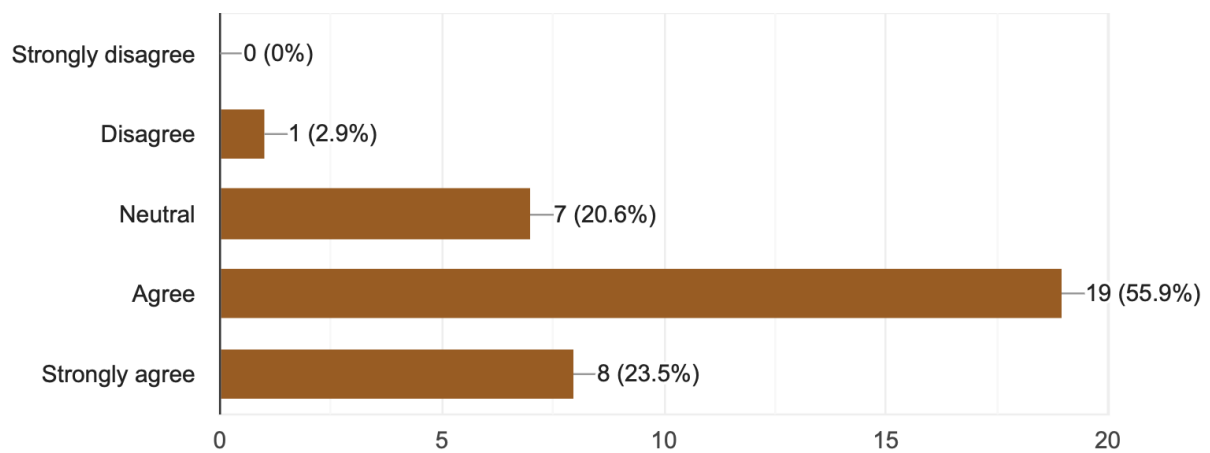


Figure 7: Statement 2 Non-formal learning with WeChat supports self-directed learning and fosters learner's autonomy. One student in the first-year class and one in the second-year class checked "disagree."

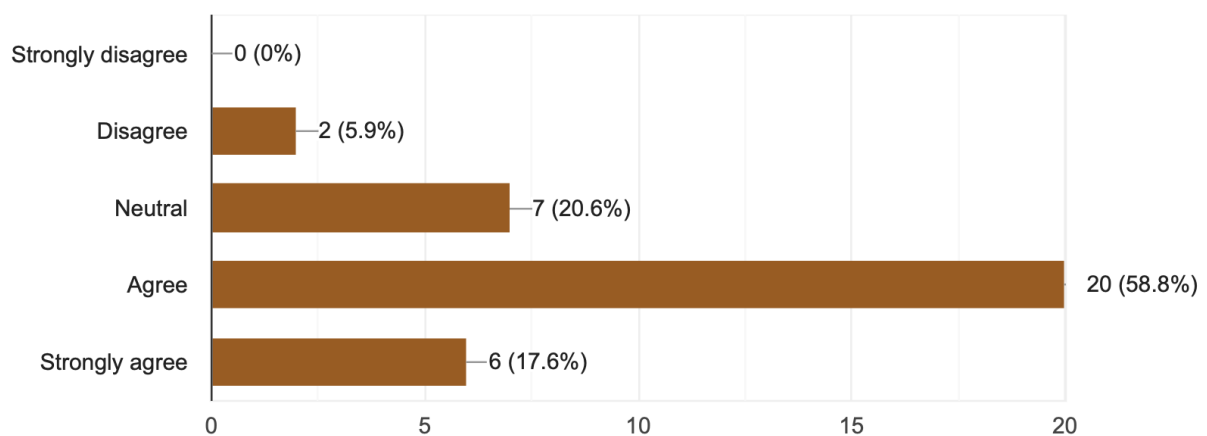


Figure 8: Statement 3 Non-formal learning with WeChat helps you gradually take control of learning to reach the goal of autonomous language learning. One student in the first-year class and one in the second-year class checked "disagree."

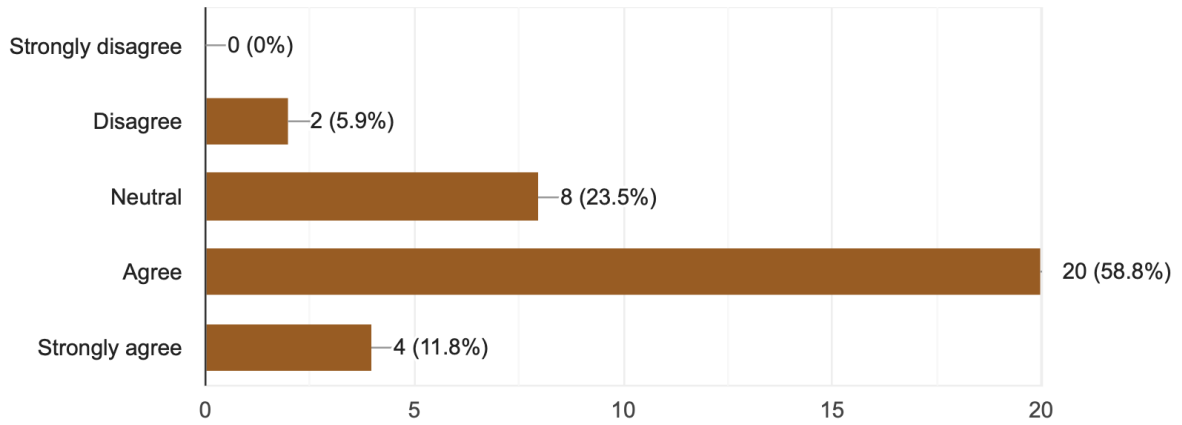


Figure 9: Statement 4 Non-formal learning with WeChat supports the development of Chinese language skills in reading and writing. One student in the first-year class checked "disagree."

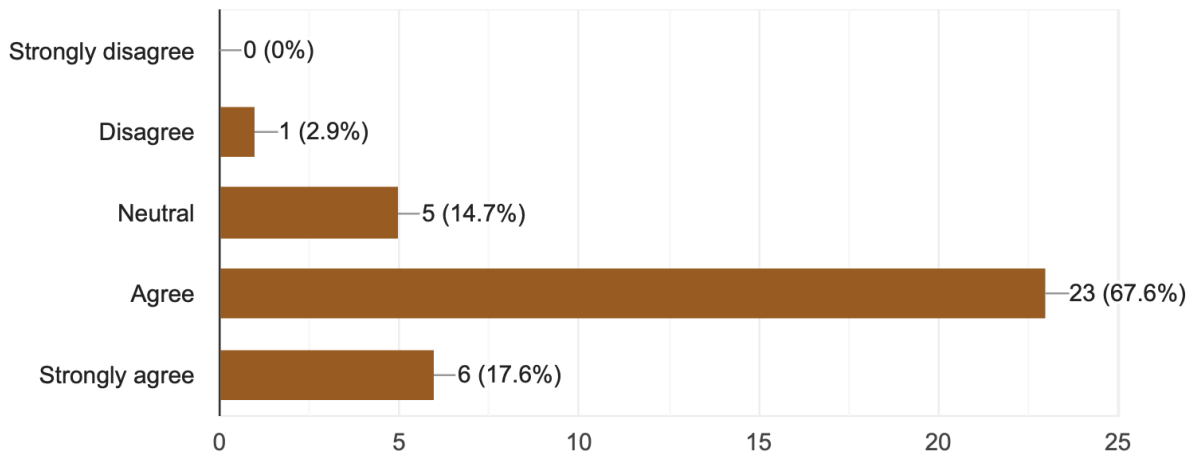


Figure 10: Statement 5 The learning resources, such as songs, short video clips, and movies, provided on WeChat, support self-directed learning and foster learner's autonomy. One student in the first-year class checked "disagree" and "Neutral" at the same time.

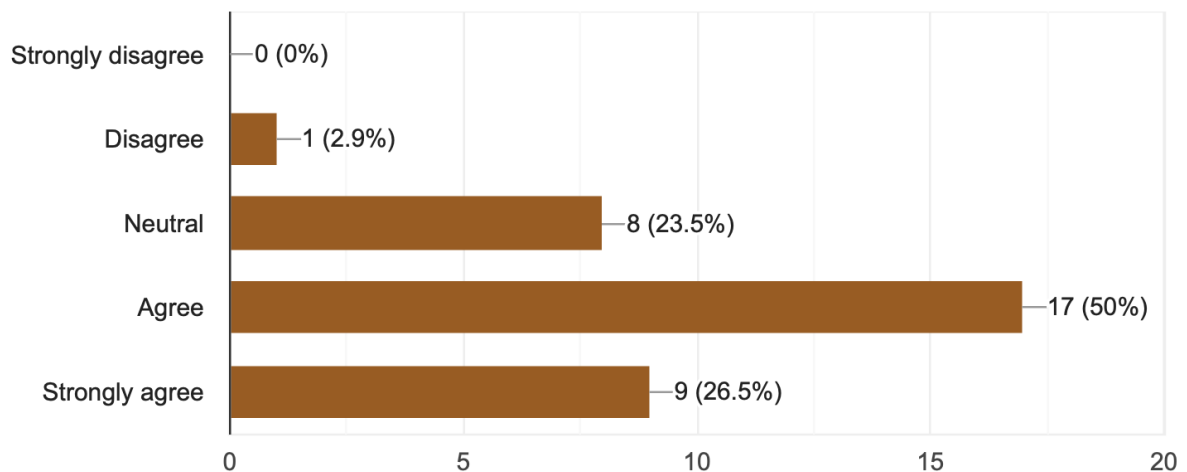


Figure 11: Statement 6 The class blog improves writing skills through commentary by the instructor and peer, promotes interactive readership, and develops a sense of authority. One student in the first-year class and one in second-year class checked "disagree."

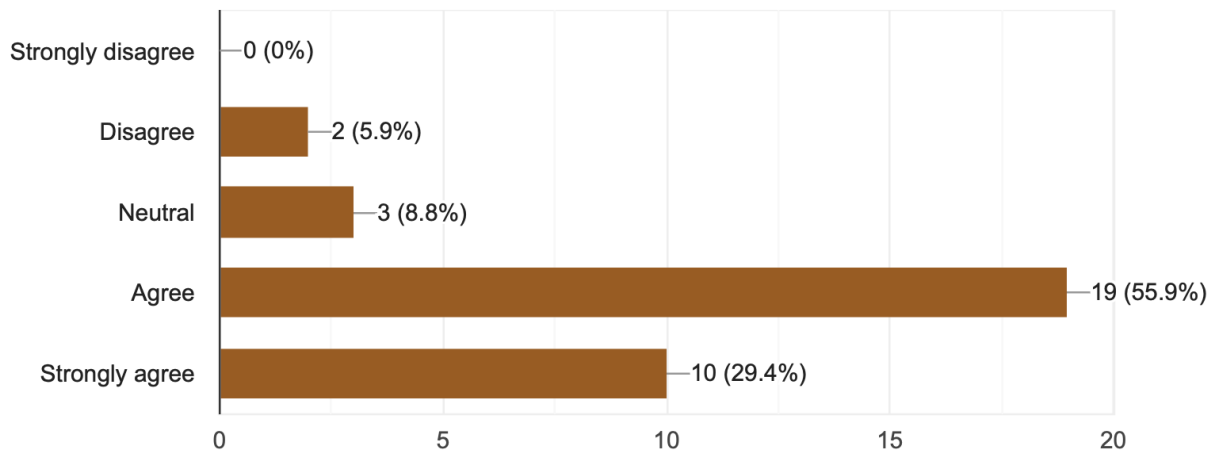


Figure 12: Statement 7 The blogging in various formats, such as text, picture, audio or video to express personal stories or ideas related to the topics learned in the class facilitate learner's autonomy. One student in the first-year class checked "Strongly disagree."

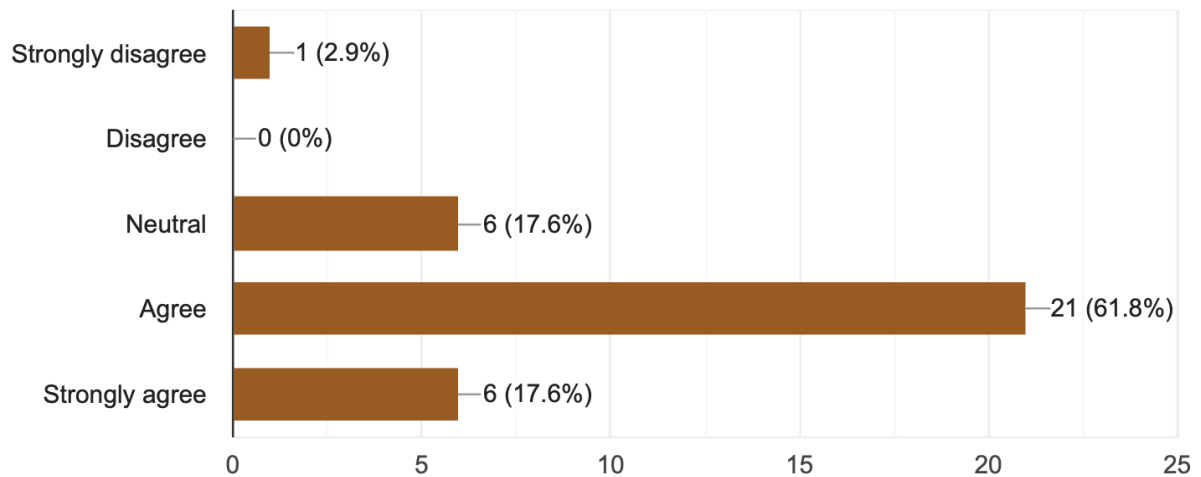


Figure 13: Statement 8 The tasks assigned help support self-directed learning outside the classroom and bridge in-class instruction and out-of-class learning.

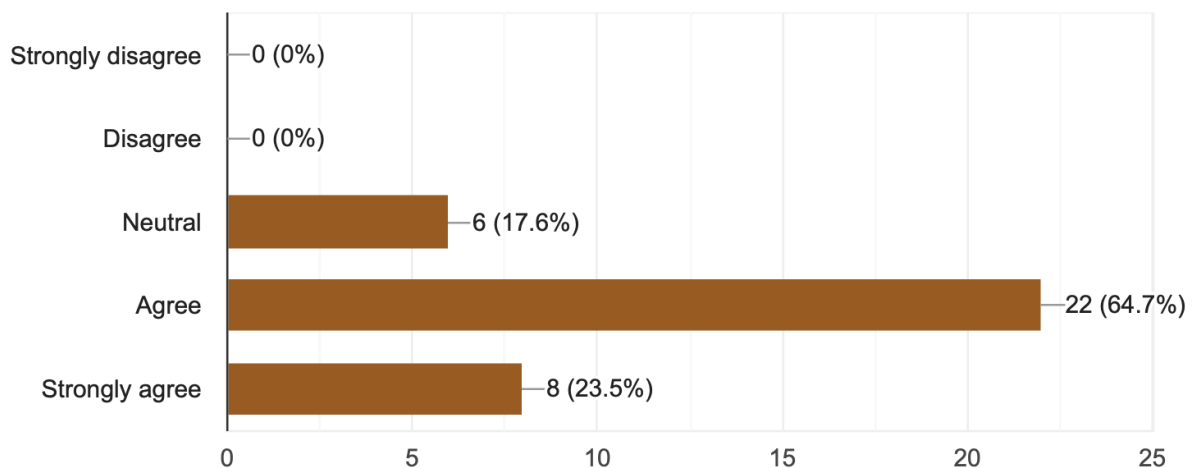
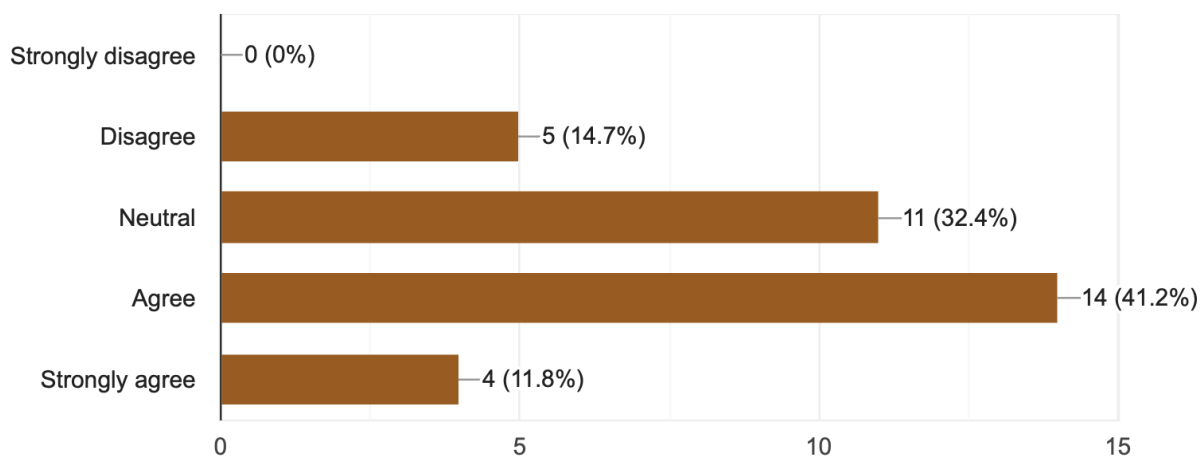


Figure 14: Statement 9 The autonomy motivates you using social media in Chinese language learning. Five students in the first-year class checked "disagree."



Discussion and Pedagogical Implication

The results of the survey showed that overall reaction from the learners in all three levels was generally positive to the integration of WeChat and blog in enriching autonomous Chinese language outside from classroom.

First, the investigation to the nature of autonomous Chinese language learning with technology and social media among the learners in three proficiency levels displayed that although WeChat and blog were required to use, not every student was motivated to use them in out-of-class Chinese learning. The percentage of students interested in joining the WeChat group among the first-year student is 72%, for the second-year student is 92%, and for the fourth-year student is 60%. In addition to highest interest joining the WeChat group, students in the second-year class also demonstrated more interest in interacting in the group chat compared to students in the fourth-year class who were less motivated. On the other hand, the amount of student interest using the blog as an educational tool increased greatly. However, the percentage of students frequently participating and posting comments to classmates' posts was only 10%, with one student in the fourth-year class and two students in the second-year class responded "often."

Second, when evaluating learner's attitude towards WeChat and blog use in fostering autonomous Chinese language learning, students in all three-level mostly agreed that the practices helped them develop autonomy in Chinese language learning beyond the basic classroom setting and helped them improve their reading and writing skills. The compelling finding was that the few "disagree" voices were mostly from the students from the first-year class, especially to the last statement showed on Figure 14.

Language learners widely use social media as a tool outside of the structural classroom setting to improve language skills and facilitate learner autonomy. The current study suggested that the learner at the novice level in college needs a considerable amount of support to encourage utilizing technology as an instrument to develop motivation and maintain learner autonomy beyond the classroom.

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The usefulness and improvement of one-to-one online oral English courses in China**Bio data**

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Abstract

Online one-to-one oral English can be considered a new form of English learning, which has been increasingly adopted by adult English learners in China. This study examines learners' perceived usefulness and their learning outcome of one online one-to-one oral English course for adult learners to find out positive aspects that contribute to usefulness of such courses and what can be further improved. 18 adult learners from different cities in mainland China participated in this study and each of them received three lessons. Data are collected through pre and post oral English tests to examine the learning outcome, questionnaire is used to examine positive and negative components, and semi-structured interviews are conducted to probe into the learners' perspectives. Quantitative results show that participants made progress in complexity and they regarded this course as a pleasant learning experience. Qualitative results revealed several factors that contribute to learners' learning: (1) opportunities to express personal views; (2) timely scaffolding; (3) efficient feedback, while improvements should be made by providing (1) homework with timely feedback and correction (2) real-time video course as choices; (3) online study groups. Four constructs "perception", "action", "relation" and "quality" of van Lier's ecological theory are used as an analytical tool and theoretical framework to provide insights into the results. A mode with four constructs is built to show inner relationships of the results and an improved course model for one-to-one online oral English learning is provided in the end.

Conference paper

Introduction

Online courses and programs soar shockingly with various forms due to a huge demand for English learning in China for different purposes like better job opportunities, reading technical materials, and studying aboard. However, due to the complexity and difficult operation on researching into synchronous one-to-one online courses, most research carried out in China focuses on asynchronous online courses, which fails to provide theoretical instructions for the active online educational market in China. Ecology, which looks at the organisms in their relationships with the environment, has been used in SLA and CALL studies to explain factors that influence the learning and provide insights into improvements (Berglund, 2009; Peng, 2012). The ecological approach, in the words of van Lier (2006, p. 17), aims to understand "what is in this environment that makes

things happen the way they do.” Thus, this paper applies van Lier’s ecological theory as an analytical approach to examine the usefulness and students’ views toward the one-to-one online oral course and then looks into the helpful and discouraging components that account for the positive and negative perspectives that shape learners’ learning. Based on the findings, a number of implications for better online one-to-one oral English course model are provided.

Theoretical framework

When ecology is applied in language learning, ecological linguistics focuses on the full complexity and interrelatedness of relationship between the organism and its learning environment (van Lier, 2006, p. 11). In this study, the participant is taken as the organism and all the elements that students encountered construct his/her online learning environment, including the instructor, class activities, course materials, and ways to stimulate interaction. According to van Lier’s ecological theory (2004, p. 86), among all the characteristics of the ecological approach, “perception”, “action”, “relation” and “quality” are the four basic organizing constructs, which are used as an analytical tool and theoretical framework to examine the inner relationships of the learners’ learning in this course.

Perception

Perceiver is taken as an active explorer of information and the information is picked up partly driven by the purposes of the perceiver. With the multisensory characteristic of perception, the notion various senses (particularly auditory and visual) work in concert to facilitate meaning making can be extended to other areas of language experience (van Lier, 2004, p. 88).

Action

Action must be taken if learners want to perceive. Van Lier (2004, p. 92) states “to perceive, we must act and to act, we must perceive.” Learners must act to pick up linguistic information they need for activities and projects. Activities like scaffolding in one’s environment bring forth the affordances in those environments that are related to the agent. In this study, previews, free talk and other sessions are activities provided for learners.

Relation

Relation discussed in this paper is how a different self is constructed through the influence of three other constructs in this theory and interacts with each other. The self is seen as past, present, and future oriented by Colapietro (1988) and Wiley (1994). And identities can be projections as well as projectors of the self and serve to connect the self to the world in a multiplicity of ties, roles, aspirations and practical activities (van Lier, 2004, p. 96).

Quality

The quality of educational experience, from van Lier’s point of view, cannot be measured by test scores. Learning is the ability to adapt to one’s environment in increasingly effective and successful ways (van Lier, 2004, p. 98). When it comes to language learning, language learning is that learners increasingly engage themselves in learning and successfully acquire some aspects of language. As van Lier explains in an ecological way, language learning is not “input” but “engagement”.

According to van Lier (2004, p. 86), these four basic constructs are interrelated with each other in different situations. Van Lier’s framework provides useful insight into how the participants’ views towards the online learning model and usefulness of it in this paper.

Method

Participant information

The researcher sent a link with the introduction and requirements of course through a widely used social platform called WeChat in China. Finally, eighteen applicants from different provinces in mainland China, such as Shanghai and Guangzhou were included in the research. The variety of the students’ background information ensures the representativeness and holistic findings of this small-scale study. The information of participants is provided in Table 1 below.

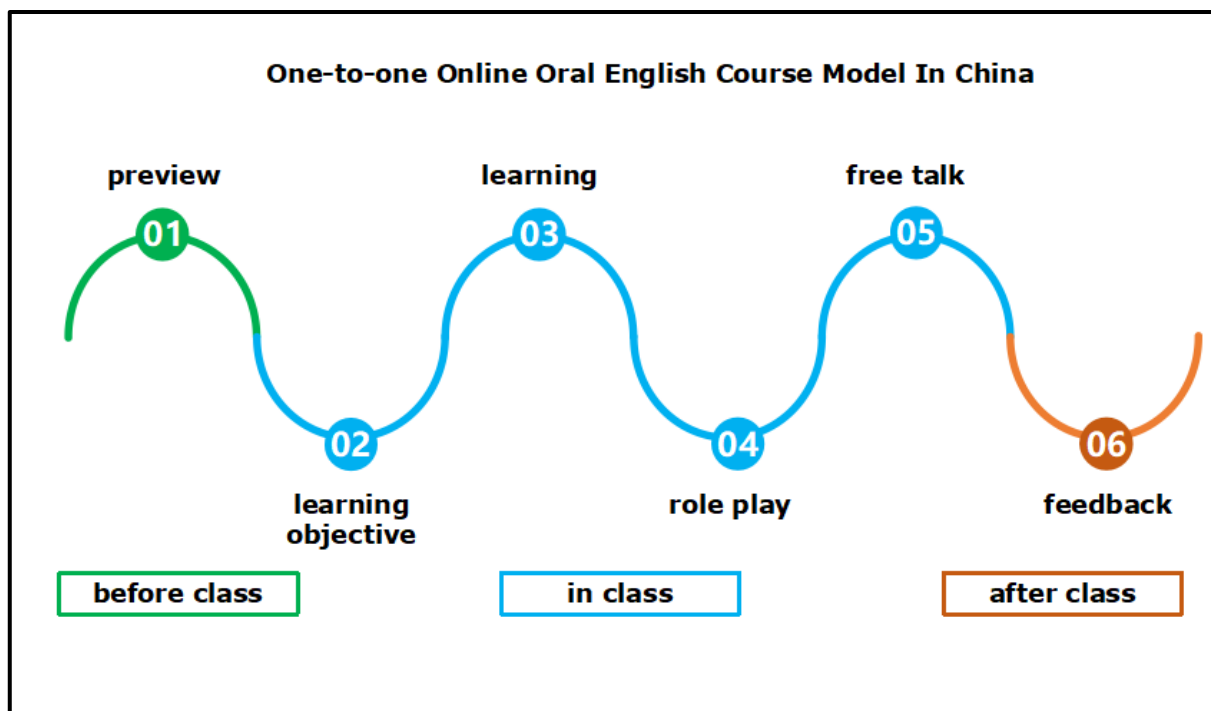
Table 1: Participant information.

Number	participants	Gender	Region	English proficiency	Job	Age
1	Gao	F	Shanghai	CET-4	Travel Agent	25
2	Yang	M	Guangdong	CET-6	Postgraduate	26
3	Li	F	Jiangsu	CET-4	Undergraduate	21
4	Dannie	F	Sichuan	IELTS 7	English Teacher	27
5	Sunny	F	Guangdong	CET-4	Foreign trader	24
6	Cao	F	Inner Mongolia	TOEFL 70	Graduate	25
7	Liu	F	Guangdong	IELTS 6	Teacher of Law	25
8	Erin	F	Guangdong	TEM-8	Safety Assessor	28
9	Ma	F	Shanghai	CET-6	Postgraduate	23
10	Xiao	F	Jiangsu	CET-6	Auditor	24
11	Liang	F	Shanghai	CET-6	Undergraduate	24
12	Kong	F	Jiangsu	CET-4	Undergraduate	20
13	Hua	F	Guangdong	GET-6	Buyer	23
14	Billy	F	Guangdong	CET-6	Gynecologist	35
15	Ma	F	Guangdong	CET-6	Postgraduate	24
16	Kong	F	Guangdong	CET-6	Undergraduate	21
17	Pan	F	Guangdong	CET-6	Undergraduate	20
18	Lu	M	Guangdong	CET-4	Bidder	23

Data collection and analysis

This study examines a model (See Fig. 1) for one-to-one online oral English courses used by leading online educational companies in China. The current one-to-one online course is a reproduction based on the model used in the market of China. Eighteen young adult English learners from different parts of China are invited to attend three online one-to-one lessons designed based on the model. Both quantitative and qualitative methods are utilised to examine usefulness of the online course in two aspects: (1) progress in terms of fluency, accuracy, and complexity (using grading and t-test) and (2) students' views towards outcomes and satisfaction (using 6-point Likert Scale). Progress in oral English is examined by a test before class and a test after class, both are rated by three English teachers of the same educational company. The assessment is adapted from Skehen's mode of English proficiency assessment, which has been used in other studies to examine improvement of oral English proficiency (Liu, 2011). An online survey with 24

Fig. 1 One-to-one online English model in China



items for 6 dimensions, including (1) the instructor, (2) course structure, (3) feedback, and (4) interaction, (5) outcomes, (6) satisfaction, is employed to find out positive and negative aspects. This is followed by a semi-structured individual interview in which participants will explain their views towards the six aspects and their learning experience. Qualitative methods such as content analysis and categorisation are used to analyse all data collected.

Results

Results in changes in oral English proficiency

The results of pre-test and post-test below show that learners make improvement in complexity while no significant improvement in fluency and accuracy (Table 2 & Table 3). Table 2 Changes in fluency, accuracy, complexity

	Fluency pre	Fluency post	Accuracy pre	Accuracy post	Complexity pre	Complexity post
N	18	18	18	18	18	18
Mean	1.75	2.03	2.07	2.22	1.93	2.11
SD	0.49	0.51	0.46	0.43	0.51	0.48

Table 3 Results of t-test in fluency, accuracy, complexity

	Fluency	Accuracy	Complexity
P (T<=t) one-tail	0.08	0.13	0.03
t Critical one-tail	1.74	1.74	1.74

Although participants made progress in complexity only, their perceived outcome of course is high with a mean of 5.70 shown in Table 4 (students' views towards the learning experience). All participants regarded this experience as a pleasant learning experience with means over 5.5 in each dimension. The result of the students' views matched their overall positive understanding towards the course in the individual interview.

Table 4 Students views towards the learning experience

Factors	Mean	Standard Deviation
The role of the instructor	5.93	0.07
The course	5.93	0.06
Feedback	5.90	0.09
Interaction	5.92	0.11
Learners' perceived outcome	5.72	0.43
Learners' satisfaction	5.72	0.36

Results of semi-structured individual interview

A careful analysis of the data collected from the interviews regarding the positive and negative aspects of their experience reveals several themes which were categorized into four constructs of van Lier's ecological theory (Table 5 & Table 6).

Table 5 Positive aspects in students' views towards their learning experience

Constructs	Positive aspects	Frequency
Perception-Action	Opportunities to express personal views	11/14
	Timely scaffolding	10/14
	Efficient feedback	3/14
Action-Quality	Successfully speaking out	5/14
	Changes in English learning strategies	3/14
	Best oral English learning experience ever	3/14
Quality-Relation	Confidence in further English learning	12/14
Relation-Perception	Motivation to improve oral English	12/14

Table 6 Negative aspects in students' views towards their learning experience

Constructs	Negative aspects	Frequency
Perception-Action	No homework with checking and feedback	11/14
	No peer interaction	3/14
Relation-Perception	No real-time video for class control	6/14
	Less formal	5/14
	Not fully preview before class	4/14

The constructs interact with each other in the situation of the course model, which results in Fig. 2 (Inner connections between four constructs of ecology) to show their have inner connections.

Varied activities bring forth perceived affordance

The connection between action and perception is that varied activities of the course bring forth perceived affordance, which facilitates action and contributes to perception. Most of the participants reported that they gained opportunities not only to speak out but also to express their personal views and feelings, especially in the role play and free talk sessions. Participant Yang felt he had no choices but to speak and think in English due to the frequent interaction, which gave him a sense of achievement in learning English. Participant Lu memorized expressions through pictures and sometimes words in the dialog box, which improved his listening and speaking. Feedback was efficient for six of the interviewees because they recognised their mistakes and consolidated acquired information through the personal feedback. But they also reported that the lack of homework with checking and feedback made the course less effective. Peer interaction was also recommended for communication in L2 after class.

Engagement improves the quality

In an ecological perspective, engagement is the fuel for learning instead of "input" or "exercises" (van Lier, 2004, p. 98). Efficient learning activities should facilitate active engagement in learning, which would improve the quality of educational experience. Unlike traditional "mute English learning" in China, this course successfully encouraged participants to speak out and even helped some of them to develop appropriate strategies to assist their oral English learning, which resulted in their best oral English learning experience ever.

Changes in beliefs in past, present, and future self

Their overall understanding to the quality of the educational experience was positive. They reported this course provided them totally different learning experience from traditional classroom, synchronous courses or one-to-many asynchronous courses. Their current learning experience reminded them of their negative oral English learning in the past and changed their views towards their abilities to speak, which led to more positive beliefs in the current and future self.

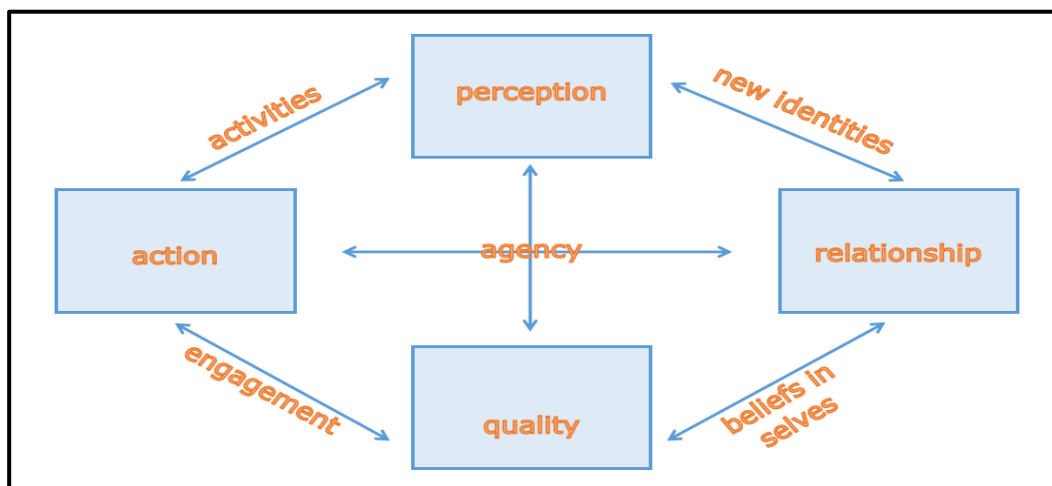
Perception shapes new identities

Not only did the participants perceive knowledge but they also perceived themselves. It is interesting to note that they understood the necessity for concentration in class, review after class and taking classes but still they sometimes failed to control themselves. However, they came up with some solutions. Most of the participants suggested that a real-time video course be a better choice mainly because it helped in monitoring. A fixed class schedule and homework checking were also advised. From this experience, they admitted that they were not yet a successful autonomous learner but tried to find solutions to motivate their learning, which would shape new identities for themselves.

Learning agency as the core

Learning agency is the core in this framework (Fig. 2). Van Lier claims that a completely pass learner won't learn. Participants employed agency to act and to perceive and at the same time they rebuild their identities. As Norton Peirce said (1995), "when language learners speak, they are not only exchanging information with target language speakers but they are constantly organizing and reorganizing a sense of who they are and how they relate to the social world". Actively employing agency to act in the learning activities improve the chance of higher quality of educational experience, which might change their beliefs in their past, present and future self as the participants reported.

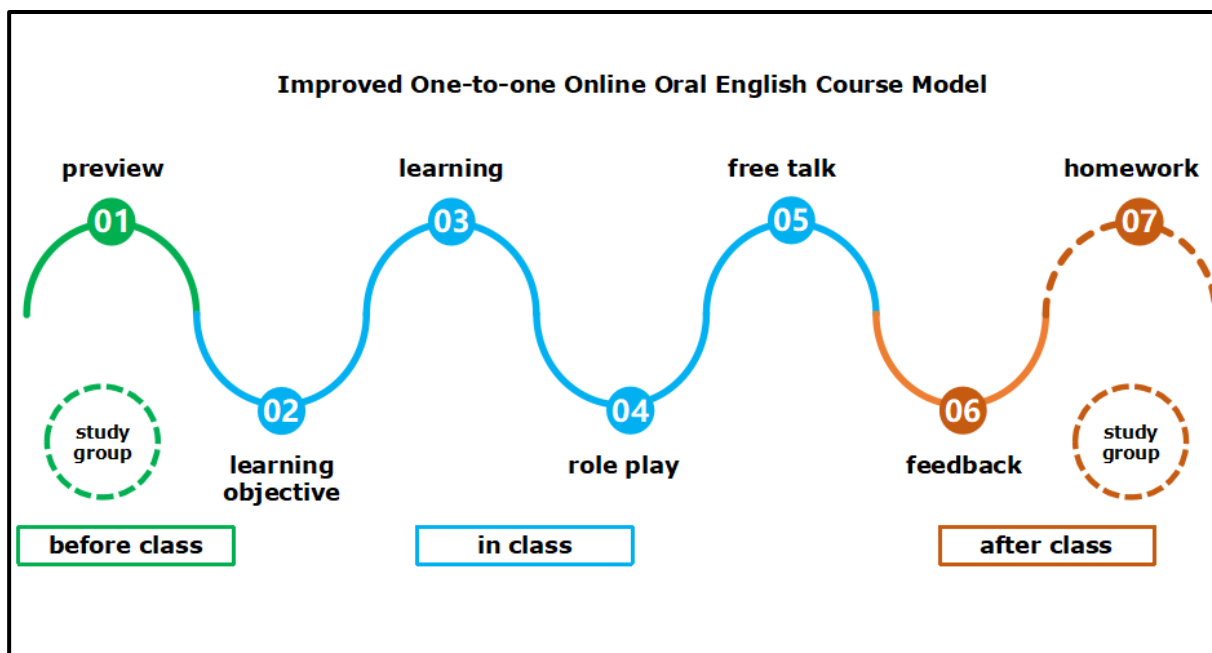
Fig. 2 Inner connections between four constructs of ecology



Discussion

The framework of inner connections between four constructs of van Lier's ecology provides insights into why and how this one-to-one online oral English course model is recognised useful and influences participants' views towards this course. According to the results above, an improved model (see Fig. 3) is provided with discussions below.

Fig. 3 Improved one-to-one online oral English course model



Maintain role play and free talk sessions with timely scaffolding

Van Lier (2006) stated agency in the final analysis as movement, a change of state or direction, or even a lack of movement where movement is expected. If the participants want to express his/her view, he/she must organise ideas and languages then speak out. These two sessions provide room for a variety of expressions of agency like listening, speaking, thinking, memorizing to flourish. As participants reported, role play and free talk sessions with timely scaffolding successfully helped them to speak, which was not only efficient for perception but changed their belief in the present self and build up new identity who can speak English after practice.

Homework with checking and correction fter feedback

Participants suggested that homework with checking and correction after the feedback session like a voice message should be provided as reinforcement and a tool to improve learners' proficiency. Thanks to the flexibility of taking classes, long interval and short in-class period may lead to no significant improvement in accuracy and fluency. However, that participants made progress in complexity might result from Erin's reflection that the instructor advised her to make full sentences.

Real-time video course as choices

Van Lier (2010) agrees that autonomy, motivation and investment are in a sense product of a person's agency. According to the reflection of the participants' learning experience, this online course was less formal than a traditional classroom, which might account for distraction (not moving to learn). A real-time video, which allows the instructor to supervise the learner and provides more visual supports like facial expressions and gestures. The learner might be more concentrated and take part in more activities, which moves the inner connections of the framework in a positive way, like higher quality of educational experience and a more confident self.

Online study group before and after class

Online study group with learners and the instructor before and after class is suggested for peer interaction in English. According to van Lier's perceptive of ecology, agency is also closely connected to identity, and this emphasizes the social and dialogical side of agency: it depends not only on the individual, but also on the environment which should be agency rich. Due to short in-class period (25 minutes per period), this course did not provide enough opportunity for participants to speak. And online study group with English as the used language might fill the gap in a certain extent. What's more, van Lier (2008, p. 599) states that meaning is created, enacted, and shared in conversation. Language learning, if

it is to be at all meaningful, and if it is to be tied to the self and the formation of identities, must therefore be embedded in conversation (van Lier, 2006, p. 149). Based on the process of language learning, conversation with peers is an effective way.

Conclusion and limitation

Due to the rapid development of China's online education, this study aims to examine the usefulness and improvement of the heated one-to-one oral English course. Learners made progress in speaking in terms of complexity. From an ecological perspective, the helpful components include: (1) opportunities to express personal views; (2) timely scaffolding; (3) efficient feedback. Improvement should be made in the following aspects: (1) homework with timely feedback and correction should be added as an important activity for reinforcement and self-improvement after class; (2) real-time video course as choices; (3) online study groups are recommended to improve abilities like creating new semiotic network except the in-class session.

Since this is a small-scale study, more efforts should be made in future research to expand the sample size and verify or improve the model so that more effective one-to-one online language courses will be offered to the market and society.

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English for specific purposes: from GE teacher to ESP practitioner

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Abstract

This paper deals with some basic concepts of 'English for Specific Purposes' (ESP) and the approaches to language teaching types of ESP. It highlights the point if General English teacher can succeed in dealing with teaching ESP, and there is a comparison between the General English teacher and the so-called ESP practitioner.

Conference paper

In recent years, many applied linguists have come to realize that to ensure students' success they need to be provided with knowledge of register/genre differences (Biber & Conrad). This awareness has given rise to the general field of English for Academic Purposes (EAP), which puts into the focus the English-language skills of selecting and using the appropriate registers/genres. The development of science, technology, education, and business, in their turn, has led to the worldwide demand of English for Specific Purpose (ESP) emphasizing the description of the language used in various registers and genres from a particular profession or academic discipline (such as biochemistry or physics) and especially the specialists who are able to teach ESP courses.

The origin of ESP and its development is closely linked with learners' interest in various specific disciplines and various genres connected with them e.g. Insurance English, English for Tourist Management, and English for Engineers etc.

Learners' motivation enables teacher to meet students' needs and expectations easier. So, the ESP teachers' work involves much more than teaching. Dudley-Evans and St. John (1998) prefer the term 'ESP practitioner' instead of 'ESP teacher' as this definition seems to be more clear and complete. They distinguish the following key roles of ESP practitioner:

- teacher;
- course designer and materials provider;
- collaborator;
- researcher;
- evaluator.

The first role is synonymous with that of the 'General English' teacher. EFL methodology changes as teaching becomes more specific. The ultimate goal of education process nowadays is developing instructional materials that contribute to students learning the particular language patterns that are typical for the different situations and different kinds of texts in specific fields.

Text varieties and the differences among them are known to affect people's daily lives. If a practitioner of any profession cannot analyze a new variety, they cannot help others learn or master it.

To solve this problem innovation approaches in mastering foreign languages based on meaning-centered tasks when a student is involved in cognitive process of analyzing communicative situations and formulating rules instead of mechanical memorizing them should be applied. Traditional instruction is directed solely at formal accuracy by means of traditional, controlled exercises where focus is on the formal elements of the language while innovation instruction is directed at establishing form-meaning mappings where attention is drawn to understanding of how language is acquired and perceived.

Thus, nowadays, foreign language teachers use problem-solving instruction for developing students' cognitive skills and facilitating their engagement in meaningful and authentic learning experiences. Case study is a vehicle that has the potential to help toward effectively meeting learning and assessment needs.

In the model of case study task development attention is focused not only on the linguistic level of lexical and grammatical means usage, but especially on a creating a communicative situation aimed at selecting the best possible solution between interlocutors, taking into account constraints and communicative opportunities.

The teacher's main role is to create real, authentic communication in the classroom based on the students' knowledge. If a teacher designs their classes for students who are studying Insurance, a teacher may rely on the students' knowledge of insurance policy types, concepts, and principles obtained during their specialized classes.

The second role is a course designer and materials provider. Teacher has to plan the course and provide materials for it. Provision of materials does not only mean appropriate content selection and making a suitable number of copies for the class. The teacher's task also includes adapting material when published materials are unsuitable for a specific target audience's need or creating their own exercises. One of the ESP teacher's tasks is to make a list of important terms, principles, rules, and procedures in the field of Insurance so that the students can easily shape and express their ideas. But, one of the main controversies in the field of ESP is how specific those materials should be. Many scientists support the idea that discipline content should cover a wide range of fields, at the same time they argue that the grammatical structures, functions, discourse structures, skills, and strategies of different disciplines are identical.

The third role of an ESP teacher is a collaborator. In order to meet the specific needs of the learners and adopt the methodology and activities of the target discipline, the ESP Practitioner must first work closely with specialists in a specific field. In case it is impossible the ESP Practitioner must collaborate more closely with the learners, who will generally be more familiar with the specialized content.

An ESP teacher should also be a researcher. Very often while designing an ESP course practitioners have no alternative than to develop original materials. It means that the ESP practitioner's role as a 'researcher' is especially important, with results leading directly to appropriate content selection.

The final role of a teacher is an 'evaluator'. All teachers should be involved in various types of assessment and the most popular one is testing students. Tests are conducted to assess the students' progress and teaching effectiveness. However, in ESP classes an additional kind of testing should take place, which is the evaluation of course and education content. General English courses are well-studied and improved by a group of methodologists whereas ESP courses are unique, as it is very often not possible to create one ESP course that would satisfy all ESP students. Therefore assessment plays the crucial role in this case.

So, a question arises: 'What is the difference between the ESP and 'General English' approach?'

According to T. Hutchinson and A. Waters, the answer to this question is quite simple, "in theory nothing, in practice a great deal" [Hutchinson, T. & Waters, A. *English for Specific Purposes: A learner-centered approach*. Cambridge University Press. 1987].

Relevant content search for creating cases for a target audience is constantly improved and becoming more interactive. Corpus can be helpful in creating a glossary of frequent collocations on a certain topic which can be further developed into case studies, which as Mostert (2007) highlights, provide not only unique scenario for critical analysis, but should help graduates prepare for employment. The fact is, employers may feel that available case study tasks are too focused on large corporations rather than preparing students for working in small medium enterprises or local companies. It could therefore be argued that by failing to provide students with case examples considering specifications of professional context they are going to work in, a teacher ignores the graduate employability agenda (Knight & Yorke 2003).

A traditional textbook applied in education process usually presents glossary derived either from the chapters or entire books, so selection of active vocabulary may not have been based on frequency decisions but only intuitions of the textbook creator. In real practice, the vocabulary that students need is the one that they can use to address their professional needs and, as our survey shows, the lack of it may very often lead to students' frustration.

Summing everything up, it should be mentioned that an education process is centered around the approach based on the learners' needs, purposes, their expectations. The success of the process depends on learning strategies and teachers' attitude and interest to ESP course, that's why motivation may be emphasized as an integral part of a learning process.

The role of an ESP teacher is seen as more complex and more responsible than a General English teacher. Understanding its peculiarities is meant to encourage universities to design education environments that go beyond traditional learning practice and focus mainly on students' needs, interests and creativity and support the development of highly skilled professionals who feel free to solve problems, work on projects and think critically.

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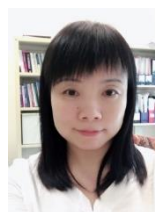
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The importance of informal digital learning practices for English language acquisition

Bio data



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Abstract

Nowadays, technologies have changed the ways we perceive every part of our life, and the sphere of education is not an exception. In particular, Web 2.0 technologies provide opportunities for new generations of learners to enhance their process of English language acquisition in various ways, allowing them to communicate with other learners from all over the world and to have easy access to the resources they need. This paper aims to present a critical literature review analysis on the effect of online digital technologies on informal learning of English language. Initially, we will define informal, non-formal and formal ways of learning, elaborating on the existing conceptualizing theories and emphasizing the differences between them. Further, the paper will describe the recent papers, where the informal learning strategies of English were underlined. Finally, we discuss the importance of informal learning practices for English language development.

Conference paper

Introduction

Nowadays, learning can happen in any place and in any time; however, in a traditional sense, when people referred to learning space, they usually meant formal settings such as classrooms or auditoriums with teachers and lecturers. During the last decade, with the appearance of new technologies and their implementation into educational process, the notion "learning space" is no longer limited by the size of the classroom. These days, learning can take place both inside and outside the classroom, as well as in physical or virtual spaces, influencing the learning process to a greater or lesser extent (Oblinger, 2006). The formal type of learning is no longer a panacea for the development of students' skills and competences, especially nowadays with the proliferation of Internet technologies (IT) to the lives of millions of people. As Richards (2009) points out, "it has taken us a while to realize that while good teaching is no less important than ever, today's learners

are not as dependent on classroom-based learning and teaching as they used to be" (p. 10). A huge influence of learning beyond the classroom through digital technologies should be considered and, in this vein, the aim of this paper is to explore the influence of informal learning on the development of English language. In addition, this paper highlights various existing conceptual theories of informal learning practices and attempts to show its features and benefits, touching upon the impact of digitalization on this process.

Formal and non-formal learning

Before elaboration on informal ways of learning, it is of vital importance to understand each type of learning separately and to examine how they were conceptualized by different authors before. The definitions and boundaries between types of learning were and still are a debatable issue in academia. Among various types of learning, the formal learning, seems to be the easiest to define. In their study, Colardyn and Bjornavold (2004) referred to the glossary and stated that "formal learning consists of learning that occurs within an organized and structured context (formal education, in-company training)...(which) may lead to a formal recognition (diploma, certificate)" (p. 71). In the same vein, Livingstone (2006) defined formal learning as a process "when a teacher has the authority to determine that people designated as requiring knowledge effectively learn a curriculum taken from a pre-established body of knowledge" (p. 204). In other words, formal education is characterized by prescribed structured and organized content, which is usually led by teacher and leads to specific kind of certification. This type of education is organized in a way to help students gradually move from one stage to another through "intermediate and final assessments" (Dib, 1988, p. 1), it usually has a top-down direction with teachers, who play the role of mediators between students and the knowledge, which needs to be acquired by students (Cross, 2011). This type of education is traditional and, in many cases, might disregard specific needs and interests of students since it might be extremely difficult to align general curriculum with the needs of every single learner (Eshach, 2007). The inability of formal education to find ways to meet the needs of every individual is one of the main cornerstones in the field of education nowadays. Therefore, even taking into account that formal education system is a core system around the world, many scholars critique it and emphasize its "...aloofness from the real needs of the students and of the community" (Dib, 1988, p. 2). Such attitudes towards traditional education have forced scholars to pay attention to non-formal and informal ways of learning.

Non-formal learning, in its turn, is harder to define, since some authors perceive it as being closer to the formal type of learning, emphasizing that non-formal learning is also a structured and pre-arranged process (Eshach, 2007; Jaguš, Botički, & So, 2018; Werquim, 2010), while the others (Sefton-Green, 2004) blur the boundaries and perceive it to be closer to informal type of learning. Schugurensky (2000) defined non-formal type of learning as "organized educational programs that take place outside the formal school system, and are usually short-term and voluntary" (p. 2). Livingstone (2006) argued that non-formal learning happens "when learners opt to acquire further knowledge or skill by studying voluntarily with a teacher, who assists their self-determined interests by using an organized curriculum" (p. 204). Both of these definitions could be partially scrutinized since some scholars noted that non-formal learning is not bounded to specific location and to the personality of teacher, who does not always play a guidance role in non-formal learning (Jaguš et al., 2018; Werquim, 2010). Latchem (2014) and Sefton-Green (2004) added that non-formal learning could take place in public institutions and NGOs, in soccer training camps and during many other voluntary or extra-curricular activities and courses, which are considered to be structured activities. In this vein, Werquim (2010), defined non-formal learning as "learning which is embedded in planned activities not explicitly designated as learning" (p. 22).

Summing up, non-formal learning could be distinguished from formal learning by its detachment from the boundaries of formal lessons, voluntariness of actions, absence of evaluation and intrinsic rather than extrinsic motivation. However, non-formal learning shares similarities with formal type of learning, such as the presence of guidance, which takes place beyond the frames of formal and compulsory education and prearrangements

of activities (Eshach, 2007; Jagušt et al., 2018; Mok, 2011). Orientation on the knowledge acquisition and absence of grading system allows learners to concentrate on the knowledge acquisition rather than being worried about their grades. With these differences in mind, we may conclude that non-formal learning does not have strict boundaries and is more directed to consider students' needs than the formal education.

Informal learning

After defining formal and non-formal types of learning and eliciting the differences between them, we may proceed to the notion of informal learning as an important part of the whole paradigm. To begin with, the interest towards informal learning appeared in the end of the XX century, when scholars of National Research Council (1996) recognized its importance and distinguished it as a separate type of learning. Back to the late 80s, when educational technologies were not developed as nowadays, Dib (1988) perceived informal learning as supplementary to formal and non-formal practices, stating that informal learning includes such activities as attending museums, various conferences and lectures, watching specific TV programs or participating in professional associations. Later, Werquim (2007) described informal learning as "...daily activities related to work, family or leisure" and researchers started to associate informal learning with online and digital activities of individuals (as cited in Jagušt et al., 2018, p. 418). However, the term "informal learning" was and still is disputable and many authors are making attempts to conceptualize their vision. Thus, while adding particular features to their definitions, in the recent years, along with the term informal learning, the authors in the field of second languages acquisition (SLA) launched several notions, which obtain similarities with the general notion but emphasize particular features and dimensions of informal learning practices.

Sundqvist (2011) elaborated on the term "extramural English" and conceptualized her term based on the dimension of settings (p. 107). While defining the notion, the author argued that it could become an "umbrella term" for such notions as 'out-of-class', 'out-of-school' (Yi, 2005) and 'naturalistic learning of English' (Benson, 2011). Later, Benson (2013) emphasized the notion of "learning beyond the classroom", describing his theoretical framework of four dimensions: location, formality, pedagogy and locus of control. While creating his framework, he concluded that the myriad of existing terms excludes some dimensions of the concept. As such, the notions "out-of-class" and "extracurricular" learning are based on the dimension of location and the others ("informal" and "non-formal") exclude other dimensions but the degree of formality (Benson, 2011). Because of the diversity of terms, which could be used as synonyms of informal learning, such scholars as Schugurensky (2006), defined informal learning as a "loose" category that combines everything that formal and non-formal types of learning do not (p. 163). However, there were many attempts to conceptualize informal learning through the prism of different perspectives.

For instance, some authors conceptualize learning based on the dimensions of location, intention or based on the degree of structure of learning process that occurs outside of formal settings (Bäumer, Preis, Roßbach, Stecher, & Klieme, 2011; Sefton-Green, 2004). So, Kim, and Looi (2008) conceptualized informal learning based on the dimensions of physical setting and intentionality, where the authors underlined that informal learning might be of an intentional or unintentional nature. Others perceived informal learning in terms of the structure and process of learning and concluded that informal learning is a self-directed and self-guided learning process, which takes place based on the intentions of a particular student (Eshach, 2007; Lai, Khaddage, & Knezek, 2013). Thus, after the analysis of existing frameworks, we may conclude that informal learning has particular features, which allows researchers to conceptualize it from different perspectives for further studies.

The main feature of informal learning practices is in pedagogy, which could be described as self-directed, self-instructed and learner-led, where instead of the teacher, the learner takes the leading role (Bennett, 2012; Eshach, 2007). Since informal learning activities are flexible to the interests of learners, to their time schedule and style of learning, the second

differentiation comes from the perspective of the purpose of learning. Whilst formal learning is connected to learning that happens within classroom settings and is based on curriculum and lesson plans and goals, informal learning practices are always based on individual preferences and interests (Benson, 2013; Eshach, 2007; Latchem, 2014). In such cases, learner does not concentrate on passing examinations or specific courses and acts in accordance with his or her preferences and interests with no official support provided by teacher or another authority (Clough, Jones, McAndrew, & Scanlon, 2008). Therefore, due to the focus on individual needs, such type of learning is often seen as effective by some scholars (Cross, 2011). Thirdly, unlike formal and non-formal types of learning, informal learning is usually unstructured and non-sequential (Eshach, 2007), what could be explained by the absence of guides or authorities. Benson (2011) described this dimension as a locus of control, where while learning beyond the classroom level the learners guide themselves. The elaboration on the existing features of informal learning allows us to understand this concept more than every existing definition. Therefore, summarizing the features and variability of activities, the influence of informal learning might be enormous because of its ubiquitous presence.

Recent research on the effect of online digital technologies on informal learning of English language

After implementation of technologies to all levels of education has changed educational practices and particularly reshaped the whole process of foreign language acquisition, different scholars (Lee, 2017; Lee & Dressman, 2017; Sylvén & Sundqvist, 2012) started to consider informal learning from the perspective of digitalization. It was said by many authors that the usage of technologies for language learning in informal settings allows students to individualize their learning, to simplify collaboration and to choose the ways to perform their tasks in an appropriate to them way (Ma, 2017).

The findings from research on informal ways of learning English shows that those students, who are more exposed to informal learning practices in digital settings tend to have higher levels of productive vocabulary (Sundqvist, 2009; Sundqvist & Wikström, 2015), better grades (Sundqvist & Wikström, 2015) and oral proficiency level (Lee & Dressman, 2017; Sundqvist, 2009). Such outcomes are possible because technologies allow to receive and transmit ideas and thoughts through visual, aural and textual modalities and by doing so they help to improve such skills as critical thinking, intercultural communication and collaboration learning skills, to name a few. Technologies facilitate the overall quality of learning and help to find access to various sources of knowledge (Bates, 2000) and enhance students' motivation and collaboration (Beatty, 2013). Many scholars paid attention to the influence of IT in education emphasizing authenticity of settings (Gilmore, 2007), opportunities for multitasking and multiple activities, immediate feedback and support (Scheeler & Lee, 2002), possible online discussions for experience sharing (Wagner & Bolloju, 2005) to name a few.

In recent years, with the growing interest towards informal ways of learning, there are some scholars who have made attempts to conceptualize their vision of informal learning in digital settings. As such, Lai, Zhu and Gong (2015) researched the quality of students' informal digital practices for learning language. The authors perceived the quality of informal practices as the diversity of form- and meaning-focused digital practices. In other words, informal digital activities were attributed as form-focused (e.g. online grammar exercises, usage of online dictionaries) if students put more influence on linguistic systems, and as meaning-focused if students were focused on "naturalistic language exposure" (e.g. watching movies, playing games in English) (p. 12). Further, by adding to this framework, Lee (2017) introduced the notion of informal digital learning of English (IDLE) by elaborating specifically on digitalization within the concept of informal learning, and defined it as "self-directed, informal English learning using a range of different digital devices (e.g., smartphones, desktop computers) and resources (e.g., web apps, social media) independent of formal context" (p. 768). By forming this notion, the author used the main dimensions of informal learning practices, which were described by Benson (2011) and Lai (2015) and added the layer of technological influence. Finally, Lai, Hu and Lyu (2018)

researched the nature of students' informal learning practices in digital environments and differentiated that there were three main types of students' interactions with technologies: instruction-oriented, entertainment and information-oriented and social-oriented. The authors emphasized that three types of interactions were based on various impetuses and students' need to understand the nature of informal digital learning more in depth through other perspectives. Therefore, it is seen that through recent studies, educators make attempts to understand the process, the nature as well as the strategies, which students use while learning in digital and online spaces in informal ways. Informal practices may allow students to learn the content in more effective ways and to create "continuous learning process" (Jagušt, Botički, & So, 2018, p. 417) along with a raised level of interest and motivation to study languages (Mubin, Stevens, Shahid, Al Mahmud, & Dong, 2013). The rationale for research in this field is to understand how the process of learning occurs and what variables are influential since the results will allow teachers to structure educational process to help their students by bridging informal and formal ways of learning.

Until recently, informal learning environments were only considered as spaces for entertainment activities; however, recently, with the growing body of research in this field, the scholars started to emphasize the ways to use such environment for educational goals by finding the ways to connect formal and informal types of learning (Eshach, 2007; Sefton-Green, 2004). Thus, while proposing his framework through the analysis of existing research, Sauro (2017) elaborated on the usage of technologies for language learning and differentiated digital wilds, as places where students use non-pedagogical web-pages and software for their learning during their leisure time, domesticated CALL (or MALL), when informal ways of learning come to class from digital wilds, and dedicated CALL as pedagogically constructed set of digital activities led by instructor. This framework justifies the recognition of informal learning activities within holistic ecology of learning since it was created to differentiate the set of activities and to point out the trend in existing studies to bridge "wild" and autonomous activities of learners with instructed and teacher-constructed practices. Therefore, there are many reasons to conduct studies to understand the process of informal learning by analysing the strategies used by students. Informal digital settings allow students to have more freedom and flexibility in comparison with formal settings and it happens because informal learning is not limited by location, time frames or teachers' choice of material (Kukulska-Hulme, 2012). Unfortunately, informal practices may be left uncovered due to several reasons starting from their invisibility and inaccessibility of its users and finishing with complexity of methodologies to get data (Benson, 2013). However, in order to help students to become better language users there is a need to concentrate on this particular field because of its possible benefits for learners.

Conclusion and directions for further studies on informal digital learning

In the modern world, language learners need to know how to take advantage not only from learning at schools or universities, but from all types of learning while using the affordances of technologies for their benefits. Such skills are considered to be vital since the influence of informal learning is beyond the boundaries of time and location and allows learners to use a wide range of features, which were discussed before. The importance of informal learning is increasing, especially if we take into consideration that not every educational institution around the world has sufficient technologies and teachers, who may guide students. Thus, further research on informal digital learning practices of English is of high importance since the results will not only help to enhance the process of language acquisition among those students, who have exposure to advanced technologies in their educational institutions of various levels, but will also give a chance to provide help to those, who do not have proper access to technologies within formal settings.

Future research on students' experiences and perceptions about informal ways of learning should add to the whole picture of foreign languages acquisition. There were several authors, who have already paid attention to the nature (Lai et al., 2018), the quality of out-of-class learning (Lai et al., 2015), and to specific informal digital learning of English practices (Lee, 2019; Lee & Dressman, 2017). However, this is only the tip of the iceberg, and future research is needed to understand how to bridge formal and informal practices

of language learning and, more importantly, to explain the process of informal languages learning in order to provide students with specific skills to learn the language in autonomous manner in digital settings.

In order to be able to help those students, who are not well-aware about informal digital learning practices, scholars need to study informal learning of particular individuals in various contexts around the world. Such an approach will allow for understanding of the particularities of individuals' learning strategies, their choice of techniques and informal learning approaches along with the quality of such practices. Lai et al. (2015) and Lee (2017) have already touched upon the quality of informal practices through the perspective of learning ecology. In their studies, the authors considered quality of informal practices through the diversity of students' engagement in informal practices. However, the process of informal learning and the quality of such activities might also be researched through other perspectives, which should be further defined and explored. For instance, in future studies, the researchers might look at the quality of practices through the perspective of the depth of students' approaches. In other words, the scholars around the world need to pay attention to the process of learning through specific applications, social media and other certain digital affordances to understand experiences of individuals' process in detail. The analysis of such phenomenon from different perspectives will help to understand the impact of myriad of internal and external factors, that influence the appearance of informal learning practices, the awareness and nature of such approaches, along with the perceptions about informal digital learning (Lai et al., 2018). It is crucial nowadays, since it is not only the influence of formal learning, that helps students to acquire the language, but interconnection of students' experiences and knowledge they get from different formal, non-formal and informal environments, which are interrelated and form cumulative educational outcomes.

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Is mobile-assisted online feedback a better way to improve pronunciation than face-to-face feedback at both word and phrase level?

Bio data



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Abstract

Peer feedback and mobile-assisted online feedback have received increased attention in the field of second language education, with overwhelmingly encouraging results. This study investigated the extent to which different combinations of teacher/peer and mobile-assisted/face-to-face feedback can help Chinese language learners improve their pronunciation. The collected data include 1) sub-scores from two speaking tests at two levels with a five-week break in between: micro or word level (consonants, vowels, tone) and macro or sentence/paragraph level (stresses, pauses, intonation and fluency), 2) surveys which measure students' feedback practices with their peers or teachers on social network software or in face-to-face communications and 3) interview data. Multiple regression tests identified 'face-to-face sessions with teachers' as the only significant predictor for improved pronunciation at the phrase level (intonations and stress). The frequency of use of the other three types of feedback (seeking feedback from teachers in mobile applications; seeking feedback from peers in mobile-assisted and face-to-face sessions) failed to predict any improvement in any dimension between the two tests. The reasons have been explored by interviews: first of all, it is difficult to visualize and model the physical and physiological aspects of pronunciation—the position of tones and muscles of the facial expressions—with mobile devices. Secondly, feedback givers spend more time discussing and explaining the meanings of reading text than correcting specific mistakes in tones, vowels and consonants. Thirdly, it is difficult for introductory language learners to communicate with others about pronunciation issues without the presence of other visual aids, such as electronic dictionaries, phonetic symbols and body language.

Introduction

This study investigated the extent to which different combinations of teacher/peer and mobile-assisted/face-to-face feedback can help Chinese language learners improve their pronunciation. Its relevance to current debates on pronunciation corrections can be demonstrated from two perspectives. First of all, there is a large volume of evidence suggesting that mobile applications can be effective in helping second language learners to engage with peer feedback (Montero-Fleta, Pérez-Sabater, & Pérez-Sabater, 2015; Yusofa, Manan, & Alias, 2012) and teacher feedback (Xu, Dong, & Jiang, 2016; Xu & Peng, 2017) in the context of writing and speaking. Secondly, although the number of studies which compare the effectiveness of face-to-face and mobile-assisted feedback practices have gradually increased, only a few studies have investigated the effectiveness of feedback practices on improving language pronunciations.

Literature review

Literature on computer-assisted pronunciation instruction can be sorted into two groups highlighting its effectiveness and convenience. The first group focuses on the effectiveness of using various computer-assisted pronunciation training programs (CAPT) to train phonetic knowledge or detect pronunciation mistakes at word level (Hirata, 2004; Luo, 2014; Wu, Su, & Liu, 2013). Automatic speech recognition components (Neri, 2008) and computer-generated visual aids (e.g. animation of tongue movements and ultrasound imaging of tongue positions) are reported as the two most important functions that benefit users' short-term improvement (Engwall, 2012; Ouni, 2014). The second group concludes that higher engagement with social networking sites, such as Twitter and Facebook, can also improve pronunciation (Fouz-Gonzalez, 2017). The main tasks include sharing explicit explanations of the target aspects and authentic targeted language video/audio files. Interestingly, unlike the evidence from the first group, evidence from the second group shows that participating in social networking may improve fluency, rather than accuracy and pronunciation (Sun et al., 2017). Finally, some studies recommend an integrated approach, which combines computer-assisted pronunciation programs and face-to-face interaction, to instruction and delivery feedback on pronunciation problems (Engwall & Balter, 2007). For example, Luo's (2014) study concludes that the combination of classroom instruction and post class CAPT techniques with peer review function can improve pronunciation quality significantly.

In relation to the effectiveness of feedback practices, most studies suggest that teacher feedback, or a combination of teacher and peer feedback, is better than peer feedback alone, although most of these studies have been conducted in second language writing classes. The advantages of teacher feedback is reported as being highly trusted by receivers and more acceptable which leads to a higher degree of self-correction in subsequent submissions (Miao, Badger, & Zhen, 2006; Park, 2018). In addition, the actual improvement in terms of grammatical accuracy after receiving teacher feedback is also reported to be greater than peer feedback (Ruegg, 2015), which tends to be more suggestive and appreciative, and not explanatory enough (Min, 2005; Park, 2018). Besides, in the context of language writing, peer feedback devotes more attention to organization and supporting evidence than to mistakes in language use (Park, 2018).

In conclusion, there are more studies investigating the effectiveness of various computer-assisted pronunciation training programs than social networking sites. Most evidence are presented at the word and sentence level. Bearing in mind that teacher feedback is considered more acceptable by learners and more effective in terms of learning outcomes, this study poses two research questions: Is mobile-assisted online feedback a better way to improve pronunciation than face-to-face feedback at both word and phrase level? And if so, why?

Research design

One hundred and five CFL (Chinese as a foreign language) learners at Jiangsu Normal University participated in the study. Collected data included: 1) scores and sub-scores from two pronunciation tests administered by reading a 399 word text at HSK Level 4 (HSK is the Chinese Proficiency Test, an international standardized test to assess non-native Chinese speakers' ability in Chinese); 2) one survey which records the frequency of seeking feedback from both teachers and peers in mobile applications and face-to-face sessions between the two tests; and 3) interviews (n = 6) which reflect learners' attitudes and experiences with the received feedback. Their pronunciation performances were measured in seven dimensions at two levels, including micro or word level (consonants, vowels, tone) and macro or phrase/paragraph level (stress, pauses, intonation and fluency).

Table 1

7 Level Indicators Explanations

Items	Definition	References
Consonant	There are 21 consonants in Chinese (b, p, m, f, d, t, n, l, g, k, h, j, q, x, zh, ch, sh, r, z, c, s).	
Vowel	There are 39 consonants in Chinese (a,o,e,i[i],u,ü, ê,-i[ɿ], -i[ɨ],er, ai, ei, ao, ou, ia, ie, ua, uo, üe, iao, iou, uai, uei, an, ian, üan, en, in, uen, ün, ang, iang, uang, eng, ing, ueng, ong, iong) .	
Tone	There are four tones of Standard Chinese. (high-level tone, rising tone, dipping tone, falling tone), together with the neutral tone.	(Huang & Liao,2011)
Pause	Readers break sentences into chunks with short pauses.	
Stress	Readers read some words louder and longer to emphasize specific part of the sentence.	
Intonation	Intonation include: statement tone, interrogative tone, rhetorical tone, satirical tone, etc., four changes of the sentence are made (up, down, flat, tune) .	
Fluency	Oral fluency is largely concerned with temporal aspects of speech such as rate and pause length. (e.g. it could be assessed by the syllables per minute.)	(Grimshaw& Cardoso, 2018)

Table 2

Semi-structured Interview Participants Information

Name	HSK Level	Mother Tongue
Billy	One	English
Nature	One	French
Mao	Three	Arabic
Chris	One	Spanish
Bennett	One	English
Yin	Two	Korean

Findings

Paired T-tests suggest significant improvements between the two tests at all seven dimensions between the two tests with most improvements in two of them at paragraph level: Pause and Intonation.

Table 3
Summary of Paired T-tests Results of Test 1 and Test 2

		M	N	SD	Sig.	Effect Size
Consonant	T1	23.39	90	49.681	0.005	0.087
	T2	9.83	90	11.632		
Vowel	T1	24.31	90	50.157	0.001	0.110
	T2	8.89	90	11.875		
Tone	T1	79.32	90	63.459	0.000	0.204
	T2	51.18	90	34.374		
Pause	T1	10.69	90	12.884	0.000	0.232
	T2	4.36	90	4.397		
Stress	T1	8.82	90	18.501	0.003	0.095
	T2	2.88	90	3.774		
Intonation	T1	4.53	90	3.014	0.000	0.225
	T2	2.80	90	2.376		
Fluency	T1	105.40	90	27.946	0.004	0.090
	T2	112.27	90	28.046		

Note: Effect size (η^2) = $t^2/(t^2 + df)$, >0.01 suggests a small effect, >0.06 suggests a moderate effect, >0.14 suggests a large effect.

Multiple regression tests were used to determine the relationship between four types of feedback practice and the progress between the two speaking tests in seven dimensions. Four independent variables were used to predict the improved results from the scored seven dimensions: the frequency of seeking feedback from teachers in 1) mobile applications and 2) face-to-face sessions, and the frequency of seeking feedback from peers in 3) mobile applications and 4) face-to-face sessions. Multiple regression tests identified 'face-to-face sessions with teachers' as the only significant predictor for improved pronunciation at the phrase level (intonations and stress). The frequency of using the other three types of feedback failed to predict any improvement in other dimensions between the two tests.

Table 4
Summary of Multiple Regression Test Results

	Face-to-face with teachers	Face-to-face with peers	Mobile with teachers	Mobile with peers
Consonant				
Vowel				
Tone				
Pause				
Stress	R ² = .035*, B = .215*			
Intonation	R ² = .037*, B = .220*			
Fluency			R ² = .131, B = -.375	

Note: * $p < .05$

The TAM model was used to code the interview data. In comparison with face-to-face feedback, seeking feedback in mobile applications from teachers and peers were reported as not useful and difficult to use for at least three reasons. First of all, it is difficult to visualize and model the physical and physiological aspects of pronunciations—the position of tones and muscles of the facial expressions—with mobile devices. For example, Billy, whose mother tongue is English, has no sense of standard Chinese tones, especially the second and third tones. One time, on the phone, when someone was making demonstration of a third tone meaning '马 ma' (horse), he couldn't visualize it. But in a face-to-face situation, he said that people used their hands to draw in the air and make his tongue and

head go up and down. It helped him a lot. Secondly, feedback givers, either peers or teachers, spend more time discussing and explaining the meanings of reading text than correcting specific mistakes in tones, vowels and consonants. Understanding the meaning of a text can help learners to make a pause and to be aware of the change of intonations by the end of each sentence. However, it does not help the students to be aware of their pronunciation mistakes at the word level. For example, Yin said that once she read a paragraph and asked for feedback from others, the comment did not usually focus on the accuracy of the pronunciation. As long as they could understand what she read, the conversations were not interrupted. She recorded that many comments focused on the complimentary words, which suggested a pause between two sentences due to the principle of being polite. Thirdly, it is difficult for low-level language learners to communicate with others about pronunciation issues on mobile devices, without the presence of other visual aids, such as electronic dictionaries, phonetic symbols and body languages. For example, Nature said that English and Chinese are the most two common languages used by others in chatting software. His mother tongue is French. He preferred face-to-face communication, where he can point fingers at specific characters or words and ask for clarifications.

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Effects of video-based collaborative and formative practices on EFL learners' public speaking anxiety and language proficiency

Bio data



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Abstract

The current research explores the effects of video-based formative practices on easing English language learners' speaking-related anxiety and improving their target language competence in a blended language course at a comprehensive university in mainland China. Using a quasi-experimental research approach, 51 university students were randomly assigned into two-comparative groups, 25 in the self-assessment-initiated group and 26 in the peer-assessment-initiated group. The one-way ANCOVA analysis was conducted based on the data of learners' speaking-related anxiety and public speaking competence in the pre- and post-tests. Results indicated that learners in the first group showed significantly lower public speaking anxiety compared with those in the second group. Very

interestingly but also on the contrary, learners in the second group showed significantly higher public speaking competence compared with those in the first group. Related pedagogical implications were discussed at the end.

Conference paper

Introduction

During the process of language learning, foreign language anxiety (FLA) is regarded as a critical affective variable influencing language learners' foreign or second language acquisition (e.g., Arnold, 2005; Horwitz, 2001). A number of previous studies have reported its negative effects on learners' language learning (e.g., Hewitt & Stephenson, 2012; Horwitz, 2001; Oxford, 2017; Yan & Horwitz, 2008). Among English language related activity, English public speaking is regarded as the most anxiety-provoking activity (Koch & Terrell, 1991; Pichette, 2009; Young, 1990; Young, 1999). Previous studies have reported factors affecting FLA and possible strategies to alleviate FLA. However, few studies used video-based collaborative and formative practice to reduce learners' English public speaking anxiety and further improve their language proficiency. With the positive influence of formative assessment on enhancing learners' learning (e.g., Black & William, 1998a; Kennedy, Chan, Fok, & Yu, 2008; Pellegrino, Chudowsky, & Glaser, 2001), formative assessment has increasingly been implemented in Chinese educational contexts (e.g., Chen, Kettle, Klenowski, & May, 2013). In this study, video-based formative or collaborative assessment practices were designed to support English language learners' English public speaking. Through a quasi-experiment research, this study attempted to analyze the effects of video-based collaborative and formative assessment practices on English language learners' English public speaking anxiety and their language proficiency.

Literature Review

Formative Assessment

Formative assessment was proposed by Michael Scriven in 1967 to explain distinct roles of formative assessment and summative assessment (see Sardareh & Saad, 2012). It refers to the assessment that is specially intended to generate feedback on performance to improve and accelerate learning (Sadler, 1998). Previous studies have reported positive effects of formative assessment on learners' learning achievement (e.g., Black & William, 1998a; Black & William, 1998b; Kennedy et al., 2008; Pellegrino et al., 2001). Several studies have researched about formative assessment practices in the college English teaching in Chinese context (e.g., Tang & Zhang, 2007; Wang & Zhang, 2008; Wen, 2011). However, the research of formative assessment practices mainly focused on its effects on learners' English reading and writing skills, while there is still limited research concerning the application of formative and collaborative assessment in speaking-related activity, especially in English public speaking.

Foreign Language Anxiety

Foreign Language Anxiety (FLA) refers to "a distinct complex of self-perceptions, beliefs, feelings and behaviors related to classroom language learning arising from the uniqueness of the language learning process" (Horwitz, Horwitz & Cope, 1986, p. 128). FLA has been recognized as a crucial affective variable effecting learners' foreign or second language learning achievement (e.g., Arnold, 2005; Horwitz, 2001). Scholars have studied FLA from a variety of angles like second language classroom anxiety (e.g., Guo, Xu, & Liu, 2018; Horwitz, 2001; Horwitz et al., 1986; Kondo & Ying-Ling, 2004; Melchor-Couto, 2016) and specific skill-based anxiety (e.g., Elkhafaifi 2005; Hilleson, 1996; Pae, 2013; Wen, 2011; Young, 1990). Among these specific skills, speaking-related activity is regarded as the most anxiety-provoking language learning activity (e.g., Koch & Terrell, 1991; Pichette, 2009; Young, 1990; Young, 1999). Young (1990) found that the main FLA triggers are fear of making mistakes, speaking spontaneously in front of peers and taking part in oral activities in class. Several studies have indicated the existence of test-taking anxiety for language learners (e.g., Cheng, Horwitz, & Schallert, 1999; Horwitz et al., 1986; Li, 2015; Liu, 2016). Thus, this study designed video-based formative assessment practices in

English public speaking course and tried to explore its' effects on English language learners' English public speaking anxiety and language proficiency.

Research Methodology

Research Context

This study was conducted in an English public speaking course for learners who learn English as a foreign language (EFL) at a comprehensive university in mainland China. The course is an elective course and is targeted at improving EFL learners' integrated skills in composing and delivering English public speeches. The course lasted for 16 weeks with a 2-h class period per week.

Participants

Total of 51 sophomores who have selected this course participated in this study. The participants came from different majors (mostly were computers and business administration). 41.5% participants have passed the CET-4 exam and three of them have passed the CET-6 exam, which are two levels of national English language test to examine learners' English proficiency.

Research Procedure

This study is a quasi-experimental research. 51 students were randomly assigned into two-comparative groups, 25 in the self-assessment-initiated group and 26 in the peer-assessment-initiated group. They were required to make three public speeches and their performance was recorded by the videotaping devices. For the self-assessment-initiated group, they were asked to complete the video-based self-assessment, peer-assessment, teacher-assessment, and video-based self-reflection for three individual public speaking tasks. For the peer-assessment-initiated group, students were required to complete the peer-assessment, video-based self-assessment, teacher-assessment, and video-based self-reflection for the same three individual public speaking tasks. The data was collected through two questionnaires, namely, the Personal Report of Public Speaking Anxiety (PRPSA, McCroskey, 1970) and the English language self-efficacy (ELSE) questionnaire (Su, Zheng, Liang, & Tsai, 2018; Wang, Kim, Bai, & Hu, 2014) and learners' reflective journals. The one-way ANCOVA analysis was conducted.

Results and Discussion

The results of one-way ANCOVA analysis indicated that learners in the first group showed significantly lower public speaking anxiety compared with those in the second group. Very interestingly but also on the contrary, learners in the second group showed significantly higher public speaking competence compared with those in the first group. Moreover, no significant difference was revealed through learners' self-report language self-efficacy. Learners' reflective journals upon video-based self-reflection were also collected after three rounds of public speaking, and content analysis were used for further understanding the above findings. The qualitative data showed that self-assessment-initiated formative practices helped learners pay more attention to their delivery skills in the public speaking while peer-assessment-initiated formative practices may lead learners to further improve their appropriate use of language. Although learners reported their persistent efforts for improving their public speaking competence and managing their speaking-related anxiety, a majority of Chinese students in both groups were still unconfident in their overall language proficiency. The study sheds light on the potential of different procedures of conducting formative assessment on alleviating learners' public speaking anxiety and improving their competence in public speaking. In addition, collaborative assessment practices were found to be effective for supporting EFL learners' sustainable work for self-improvement. (To be submitted to a peer-reviewed journal)

Conclusion

This study adopts an ecological approach, aiming to explore the effect of video-based collaborative and formative practices on learners' second language acquisition, particularly focusing on alleviating their public speaking anxiety. Our investigation emphasizes the teacher's role of sequencing video-based formative practices and learner's interactions

mediated by technology from an ecological perspective. Our findings provide useful insight and pedagogical implications that can contribute to technology-enhanced language teaching in the classroom.

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Exploration and practice of blended teaching modes of college English based on the platform of ReallyEnglish

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Abstract

At present, a number of colleges and universities are assuming the initiative in creating a diversified teaching and learning environment through full utilisation of information technology, as well as encouraging teachers to build and make use of online English learning platforms to transform and expand teaching content with high-quality online educational resources, so as to achieve the implementation of blended learning modes, such as flipped classrooms, based on combinations of classroom and online courses. In this way, the development of students can be oriented by active, autonomous and individualised learning. This paper explores the blended learning mode of College English Based on the platform developed by ReallyEnglish.

Conference paper

The objectives of the current College English teaching reform are to cultivate students' English application abilities, enhance their intercultural communicative awareness and interpersonal abilities, develop their autonomous learning abilities as well as improve their comprehensive cultural literacy, so as to enable them to fulfil the demands of the development of the nation, society, schools and individuals by effectively applying English in their study, life, social communication and future work. In College English classes, task-based, cooperative, program-based and inquiry-based teaching methods can be adopted to embody the teaching concept of 'teacher-leading and student-centred', in order to achieve the transformation of teaching activities from 'teaching' to 'learning', the transformation of the teaching process from 'purpose of teaching' to 'demands of learning', and ultimately promote the normalisation of teaching characterised by teachers' guidance and inspiration, coupled with students' active participation. By making full use of information technology, colleges and universities are expected to take the initiative in creating diverse teaching and learning environments, encouraging teachers to build and use online English learning platforms, transforming and expanding teaching content by taking advantage of high-quality online educational resources, and implementing blended teaching modes, such as flipping classrooms, based on a combination of classroom-based and online courses. In this way, the development of students can be oriented by proactive, autonomous and individualised learning.

Because of these factors, we are committed to the implementation of the ReallyEnglish Online Learning Platform. We regard it as a tool to promote students' autonomous learning. Students' initiative and enthusiasm will be fully mobilised through the links to online resources, including the initial English proficiency test, adaptive learning, optional learning and man-machine interactive learning provided by the ReallyEnglish platform. In addition, the innovative thinking and practical ability of students will also be effectively exercised in the integration process by combining the interactive tasks of teachers and students in the offline classroom, focusing on online learning content, which is exactly what is required for the cultivation of innovative talents. It can be concluded that the blended teaching mode that integrates information technology and a conventional curriculum is an effective path to changing traditional teaching structures and encouraging the cultivation of innovative talents. It is therefore considered to be a substantial progressive measure to create efficient and high-quality teaching environments.

The advantages of both 'online' and 'offline' learning are expected to be brought into full play in blended English teaching, while teachers should cultivate students' habits of genuine, self-conscious and autonomous learning, and their passion for learning, by playing the roles of guide and supervisor, and providing personalised guidance in these fields.

Combining online resources with offline courses.

Providing both web and APP platforms, the ReallyEnglish Online Learning Platform is dedicated to "enable students to have access to and master the real, lively and practical language that is used in native English-speaking countries at any time and anywhere". In order to achieve this objective, Practical English Starter and Practical English courses are at first offered to new entrants to our school. Besides covering a number of core skills including listening, speaking, reading, writing, grammar and vocabulary, the courses also provide practical and authentic English exercises involving different areas of life, using amusing and rich animation, pictures, recordings, man-machine dialogues and original reading content. More importantly, in view of every student's individual level of English proficiency, the platform will establish a unique learning path for each one of them by requiring them to take a preliminary test, which includes listening, reading and grammar, and then pushing appropriate courses to them in line with their individual test results. Hundreds of rich courses will be offered to students on the platform, each of which includes three parts: Learning, practice and testing. Only when 60 points are reached in both the learning and testing parts will the course be considered passed. In this way students' effective learning in each link is ensured.

We are expected to make full use of the abundant resources on the ReallyEnglish Online Learning Platform to create a new mode of blended English teaching, in which students will fully engage in integrated self-learning online as well as participating in practice and consolidation sessions offline. By combining ReallyEnglish with offline classroom content, students will be assured of gains in learning; the ability to apply what they have learned in practice as well as grasping professional skills. For example, before commencing Unit 1 of the course *College Life* (figure 1), students will be expected to have accumulated vocabulary and expressions in advance by completing relevant ReallyEnglish courses including *College Education, a New Start* and *Studying at College*, so as to be able to contribute to discussion of college life and related topics in the next class. Students will also be encouraged by means of awarding bonus points to use more words that have been learned in ReallyEnglish. In addition, in view of the fact that students are expected to be able to describe the classmates they meet on campus and in the dormitories they live in during a 'talk show' in Unit 1, they will be asked to study relevant ReallyEnglish courses in advance such as *Looks and Appearance*(figure 2), *Describing People and Places* and *Good Friends*. After the objective of 'being able to express oneself' is established, students will develop the motivation to accumulate vocabulary and expressions consciously; they will learn more actively and make full use of the ReallyEnglish platform. As an area that has historically caused both study problems for students and teaching difficulties for teachers, grammar will be learned by students more easily and amusingly through the combination

of conventional grammar teaching and ReallyEnglish study. For example, to help understand the difference between 'so...that' and 'such...that' in the text of Unit 1, there are detailed and interesting interactive exercises in the ReallyEnglish module *Describing People and Places*(figure 3). If students' study this module in advance of commencing Unit 1 it will be conducive to better responses to questions raised by teachers in class and consequently leave a deeper impression. Another example is the difference between 'used to' and 'be used to', which again appears in the text of Unit 1. There are detailed and interesting explanations and exercises in the ReallyEnglish module *a New Start*, which will help to fix the distinction in students' memories and enable them to use the expressions appropriately. In addition, vocabulary reviews in textbooks are generally regarded as extremely boring by students, while a platform for vocabulary review, practice and consolidation is provided by ReallyEnglish. For example, vocabulary relating to clothing and accessories in fashion, the topic of Unit 2, can be found in the ReallyEnglish courses *Let's Go Shopping, Clothing and Fashion and Online Shopping*. Through a variety of listening and speaking exercises on ReallyEnglish which are full of interest, students will be able to master the use of words in a flexible and effective way. The combination of the ReallyEnglish platform and classroom content is the perfect manifestation of 'blending' English teaching environments. Students are expected to engage in more amusing, efficient and non-boring English learning; cultivating autonomous and proactive English learning habits as well as achieving greater progress by virtue of the effective learning design of the teacher.

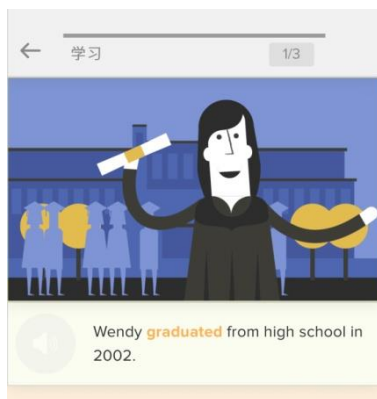


Figure 1

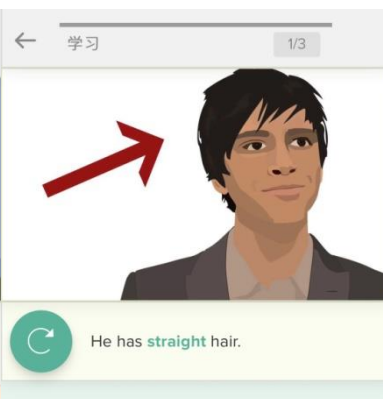


Figure 2



Figure 3

To consolidate online learning through offline activities.

The ReallyEnglish platform enables students to acquire a general grasp of basic knowledge or expression through online learning, which requires teachers to organise and motivate students to consolidate and flexibly apply the basic knowledge learned online through elaborate design of classroom teaching activities. In this way, students' initiative and enthusiasm in class will be greatly enhanced because they are fully prepared and filled with expectations for the presentation of material in class. For example, by providing students with an abundance of vocabulary and expressions, the *Designer Shopping* course on ReallyEnglish helps students to engage in classroom discussions in English on the topic of 'whether people should pursue fashion' in Unit 2 of the textbook. In addition, in Unit 3, on the topic of love, students are required to offer advice on the subject of love to three friends suffering emotional distress. Students are expected to study the ReallyEnglish courses *Words of Advice* and *Advice for a Sick Friend* in advance. Once appropriate English expressions have been accumulated and 'input' by the students, the 'output' will no longer be a problem. Another example is Unit 4, which is entitled 'Culture Shock' and in which Chinese and Western cultures are compared. In addition to the varied vocabulary and expressions that are provided to students in the textbook, students' horizons will also be expanded by studying the content of the ReallyEnglish course *Cultural Shock, a Rich Culture and Fitting into a New Culture* which looks at adaptation to different cultures while studying abroad. Moreover, the content of the ReallyEnglish courses *Weddings, Planning a*

Wedding and *Breaking up* can be effectively applied in students' drama performances portraying love stories. By integrating learning and applications, students will participate actively rather than passively in learning and devote themselves to the study of new courses on the ReallyEnglish platform with a sense of achievement brought about by participation.

Online and offline follow-up, assessment and guidance.

It is believed that the most effective way to ensure that students are encouraged to pursue continuous and persistent learning is to provide them with timely, effective and kindly assessment and guidance. Making students aware of the problems inherent in the learning process and providing guidance in solving them are considered to be crucial obligations of teachers who adopt the blended English teaching mode.

The complete, comprehensive and systematic student learning report system provided by the ReallyEnglish platform makes reporting on students' learning progress and learning effectiveness straightforward, and the reports are available at any time. The duration of every session of students' study is shown in the reports, so it is possible to monitor the students' learning activity each week. Students will be reminded to log on to the platform for study every day after class. From the results of the initial test and reports on current learning performance, it is possible to check which aspects of the students' English ability have been improved and which are still inadequate, so they can be provided with targeted guidance. In addition, tasks for students' participation in the classroom can be adjusted accordingly. By following the courses that the students have passed and the results in each course as shown in the reports, it can be determined whether the students have completed the prescribed program of offline classroom tasks for each week, and they can be promptly reminded to prepare for offline classroom tasks by completing the relevant courses. Targeted guidance can be provided to them for the content of the courses they have not passed.

The most effective method for managing the top offline English classes is to allow students to discuss, prepare, and participate in groups outside the classroom, so that students can fully utilise their time in class to learn, digest, apply, and master the content of the class. However, in doing so the inherent problems of group collaboration become apparent, for example, the tendency towards over-reliance on one or two of the students in the group, or shifting responsibility for group tasks onto others, etc., which makes it difficult for teachers to identify underachievers in the group. During this semester, the groups have been designated as A, B, C, D & E, and their class performance recorded on a table. The abscissa of the table is the name of the group, and the ordinate is the number A, B, C, D or E. A small square corresponding to each abscissa and ordinate represents a student of each group. If a member of a group actively participates in classroom activities or discussion during the class, the group's name and the member's number will be recorded to reflect the student's participation performance in the group. In this way, it is clearly shown on the record table to what extent each student in each group actively participates in classroom tasks. Correspondingly, students who do not engage in classroom interaction according to the record table will be encouraged and supervised, so that each student will receive the teacher's attention and encouragement and will actively participate in classroom interaction. In addition, students will be encouraged to apply, express, consolidate and practice what they have learned on the ReallyEnglish platform by the addition of marks based on classroom performance, further stimulating students to actively engage in study on the ReallyEnglish platform.

Conclusion

In view of the continuous exploration and practice of the blended teaching mode of College English based on the ReallyEnglish platform, I hope to design more suitable classroom activities for students' abilities and demands through further refinement of the courses on ReallyEnglish, with the view of enriching students' passion for English learning, leading to more proficient application of English as well as greater progress and achievements in English learning.

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