The role of teacher presence through online social interaction for promoting task engagement outside of class

TRAN THI NGOC, Phuong

May 8, 2019

A doctoral dissertation submitted to

the Graduate School of International Culture and Communication Studies

Waseda University

in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

ACKNOWLEDMENTS

Firstly, I would like to express my appreciation and thanks to Scholarship for Young Doctoral Student (Waseda University), Japan Student Services Organization (JASSO) and KAKENHI - Grant-in-Aid for Research Activity start-up (MEXT) for helping and providing the funding for my research. Thank you for your support for allowing me to open up my horizon to the academic world. My sincere thanks to Faculty of International Research and Education, Waseda University for allowing me to work as a Research Associate, for providing me a blessed working environment that helped me in successfully conducting this research.

My deepest gratitude goes to my supervisor, Professor Glenn Stockwell. Thank you for believing in me more than I do. You endlessly encouraged me to advance such ambitious journey of writing this dissertation. You inspired me by your knowledgeable research skills, your hardworking and passionate attitude. Thank you for encouraging my research and guiding me to grow as an academic. Your advice on my research and my career paths are invaluable. Words cannot express enough my respect and my gratefulness to you.

Besides my supervisor, I would also like to thank you my committee members, Professor Saori Sadoshima and Professor Nobue Tanaka-Ellis. Thank you for your valuable feedback and suggestions as well as hard questions that helped shape the ideas of this dissertation. I am thankful to all the seminars that I attended over the past three years under the guidance of the distinguished Professors at Graduate School of International Culture and Communication Studies. Thank you for all your collaborative discussions in different perspectives that helped strengthen my research skills.

Thank you to all the students who participated in this study, for sharing your ideas during in-class discussions and interviews. Thank you for your in-dept thoughts that having made this dissertation great implications for learning and teaching.

I would especially like to thank you my colleagues and my beloved friends in Japan, Vietnam, Taiwan, Austria and other parts of the world for supporting me in any way that you could. This journey would be so lonely without your understanding.

I would also like to thank you Marcela for giving me support with your inspiring encouragement and all your wonderful cooking during my writing process. Thank you for being my company in reaching this mountain. Thanks also to Thuy and Bao for always cheering me up through my difficulties. To Nguyen, thank you so much for your help with all the technical problem.

A special thanks to my friend in the USA, My Ien who caught me when I fell at the crucial time of my unforgettable PhD path. Thank you for dedicating time to comfort me every single day when I was feeling blue and for checking on me with such caring love. You gave me the strength to continue and excel through this tough path, I wouldn't have accomplished it without you.

Finally, I would like to thank you my family. Words can not express my gratitude to my caring mother, my sisters and my brothers. Your prayers were the invisible force that carried me through and brought me to where I am today.

To the memory of my Dad, I have achieved this to bring you pride in heaven…

Tokyo, May 8, 2019

Tran Thi Ngoc Phuong

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATION

A	Attitude towards using
AM	amotivation
BI	Behavioural intention to use
CA	Proxy-control group A
CALL	Computer assisted language learning
CB	Proxy-control group B
CMC	computer-mediated communication
CoI	Community of Inquiry
EFL	English-as-a-foreign-language
EM	Extrinsic motivation
EOU	Perceived ease of use
ESL	English-as-a-second-language
ICT	Information and Communication Technologies
IM	Intrinsic motivation
L2	Second language
LL	Language learning
M	Mean
MALL	Mobile assisted language learning
PPP	Presentation, Practice, Production
RQ	Research questions
SCROLL	System for Capturing and Reusing of Learning Log
SCT	Sociocultural theory
SD	Standard Deviation
SDL	Self-Directed Learning

SDT	Self-determination theory
SLA	Second language acquisition
SNS	Social Networking Site
SP	Smart phones
St	Students
T	Teacher
TA	Treatment group A
TAM	Technology Acceptance Model
TB	Treatment group B
TBLT	Task-based language teaching
TC	Treatment group C
TD	Treatment group D
TSLT	Task-supported language teaching
U	Perceived usefulness
ULL	ubiquitous learning log
UTAUT	Unified Theory of Acceptance and Use of Technology

Chapter 1. Introduction

1.1 Introduction

It is widely accepted that learners are unlikely to have sufficient opportunities only during class time to engage in tasks and activities necessary to acquire a second language. Thus, learners need to engage in learning activities outside of formal class time, but how to encourage learners how to do this remains an ongoing challenge for language teachers. The benefits of technology in achieving this are well-known, given the potential for, among other things, interactivity and multimedia, but research has suggested that while learners express enthusiasm in the early stages, this is difficult to maintain. Stockwell and Hubbard (2014) suggest that potential causes for this might be a lack of understanding why they are engaging in assigned activities and how to make the most of them, and that through providing training can improve both engagement and learning outcomes. Their study also revealed, however, that training takes quite a significant amount of time, and that learners would benefit from continual interaction from teachers and peers in order to maintain their momentum between classes. Indeed, Ushioda (2011) argues that the social aspect of technologies can used as a support for learning, but research is still relatively sparse to date. The research that has been carried out into the use of social networking for language learning has been quite promising, but there are still several concerns that need to be addressed to develop an appropriate model for using it in language teaching and learning contexts.

The aim of this thesis lies in determining whether or not the impact of teacher presence through online social interactions can promote task engagements outside of formal educational settings. Student engagement has been a popular topic in education and has attracted a great deal of attention from many scholars (Hong, 2008; Skinner, Kindermann, & Furrer, 2009; Helme &

Clarke, 2001; Christenson *et al*., 2012; Skinner & Pitzer, 2012; Van den Branden, 2016; Philp & Duchesne, 2008, 2016; to name just a few). Furthermore, how to trigger engagement in online tasks outside of class has been an ongoing challenge and depends on a variety of factors. One of the elements that may help to foster learners' engagement in tasks is teacher presence playing a role in facilitating online discussion (Savvidou, 2013) or a role in scaffolding peer interactions (Acar, Hong & Wu, 2017). There is evidence that social interaction offers for language practice (Philp & Duchesne, 2016) in terms of establishing a community of learners in order to holding collaborative conversation that may foster some meaningful learning in practice (Rachamim & Orland-Barak, 2016). Specifically, collaborative activities discussed through the online interactions can lead to more communication and more social interaction (Sun, Lin, Wu, Zhou & Luo, 2018), which may provide opportunities to learners a forum to express to other members their ways of thinking about a problem and also to trigger learning (Webb, 2013). As mentioned above, although social networking tools provide a means through which teacher and learners and learners and learners can interact with each other, *suggesting* that online interactions can lead to engagement into tasks, there is little empirical evidence to support this to date. A description of how this thesis seeks to further our understanding of this relationship is provided in the next section.

1.2 Background and Purpose of the Study

As described above, numerous studies have shown that learners may be able to benefit from social interactions with peers and teachers. In my experience as an English language teacher—and also a Japanese and English learner—the sense of belonging to a learning community is very important. The community in which we could build the relationship with members with the same interests and purposes form an ideal environment for personal growth as well as academic development. Studies into learning communities have tended to focus on communities of practice, which is a group of people that come together to interact with one another on common concern

or passion (Mercieca, 2017). Communities of practice are not new but have been transformed by developments in technology that has opened them up to go beyond fixed locations and allow for international participation (Wenger, McDermott & Snyder, 2002). It is not surprising that these discussions into communities of practice have also spread into educational contexts as well, and although studies into online learning communities thus far have focussed more on professional development (e.g., Hollins-Alexander, 2013) or learning of specific areas of content rather than the language itself (e.g., Lee, 2014), there is a slowly emerging body of research that also explores online virtual communities for language learning (e.g., Barnes, 2018). The purpose of this study is also to explore the nature of online learning communities for language learning, considering the roles of both teachers and learners in these communities (e.g., Salmon, 2011; Fuchs, Snyder, Tung & Han, 2017). The study considers key concepts such as teaching presence, social presence, and cognitive presence in communities of inquiry (CoI) (see Garrison, Anderson & Archer, 2000; Swan & Shea, 2004; Garrison, Cleveland-Innes & Fung, 2010), and how these relate to learner engagement in both the community itself and in tasks and activities that are the object of discussion in the community.

There are other problems associated with the personal nature of social networking, which is typically used as a means of maintain social relationships, and there has been discussion of the ethical concerns of requiring learners to make their private accounts available to teachers (Blyth, 2015). Cultural differences can lead to different views of the same technology in comparable tasks or activities (Stockwell & Hubbard, 2013). This study illustrates some of the complexities involved with using social networking in language teaching and learning, but that there is still a strong potential for using it as a tool to support learning both in and outside of class. The purpose of the current study is to examine how social networking is used by teachers and learners as a support for supplementary out-of-class vocabulary learning through Quizlet and listening activities. Specifically, the study sought to examine the types of interaction that occur

through social networking, and to explore the role of social interaction tools and the role of teacher presence in promoting the task engagement as well.

1.3 Structure of The Thesis

To begin with, the thesis provides an overview of the relevant literature in the area of SLA theory, Community of Inquiry and social networking interactions. It will then examine the role of teacher presence and the role of online social interactions, and how these aspects may be supported task engagement outside of class (the content of the literature review is described in more depth in Section 2.1). This leads to a description of the research questions posed for this study, which relate to the nature of discussion in social interactions between learner and learners and between learners and teacher as well as the role of social interactions and the role of teacher presence in support for task engagement. The methods used to collect and analyse the data are outlined, including all of the statistical figures. The results of the study are then presented, followed by a detailed analysis and discussion of these results. The thesis concludes with a summary of the significance of the results of the study, the implications of the study for language teachers and learners, as well as suggestions further research directions which may build on the results of this study. Apart from the abstract, the references, the research include seven chapters as follows:

Chapter 1: INTRODUCTION

This chapter presents the reasons for choosing the paper thesis, background and purpose of the study and the organization of the study.

Chapter 2: LITERATURE REVIEW

This chapter reviews the previous studies related to the research and how the previous studies help to build a fundamental background for the present study.

Chapter 3: THEORETICAL BACKGROUND

This chapter presents the theoretical issues related to the research including the theories for motivation and autonomy, theories for learning through technology and theories of social interaction and learning.

Chapter 4: METHODOLOGY

This chapter outlines the research design and research method, research procedures, description of the sample, instruments for data collection, data collection and data analysis, the reliability and validity of the study were fully described in this chapter.

Chapter 5: RESULTS

This chapter is concerned with the analysis of data collection as well as presenting some overall features of social interactions, teacher presence and learner engagement through LINE.

Chapter 6: DISCUSSION

This chapter descriibes the discussion of the results in the previous chapter in order to have in-depth thought for the response to the research questions.

Chapter 7: CONCLUSION

This chapter summarized the major findings of the research, gave implications for learning and teaching English, and pointed out the limitation of the study. Also, there were some suggestions for further research.

Chapter 2: Literature Review

2.1 Introduction

As described in Chapter 1, there has been a broad expansion of the use of social interaction to help provide environments for discussions among learners in recent years. This work has attracted a great deal of attention from researchers (e.g., Garrison, Cleveland-Innes & Fung, 2010; Meskill, 2013; Lai, Yeung & Hu, 2016; Lin, Warschauer & Blake, 2016; Peeters, 2018). Despite this support, as some researchers argue, not all social interactions lead to learning purposes (Lee, 2014). In order to acquire a second language, learners have to make attempt to actively engage into study not only in formal classroom but also outside of class hours. It is evident that class time alone is not sufficient to acquire the desired language proficiency. Therefore, engaging in activities outside of class is a need for all leaners, but how to build such an environment outside of class to encourage learners remains an ongoing challenge for language teachers. Applying technologies is broadly assumed to have the potential to create this learning environment, but research has proved that while students show their interest and excitement to try new tools in the beginning, it is difficult to sustain their engagement. Moreover, mobile technologies now keep learners constantly connected with one another in social non-learning relationships, and this is being capitalised upon in learning contexts as well, even though there are often mismatches between teacher and learner expectations for the type of communication that is expected to take place. A variety of studies have been investigated in order to figure out how to develop learner's engagement by not only providing learner training (Stockwell & Hubbard, 2014), but also providing suitable tasks (Ellis & Shintari, 2014), or providing peer interactions as well (Philp & Duchesne, 2016).

A study into the potential of online social interactions to serve as a supplementary platform for teacher and students to promote task engagement with the support of teacher presence outside

of class. I will firstly position social interactions in the context of second language research with respect to both the broader field of Computer-Assisted Language Learning (CALL), and more specifically social networking. From there, I shall examine the research into the features of online social interactions for task engagement which have enabled it to become popular as a medium for discussions, including its various benefits and possible shortcomings. In order to establish a base for the measurement of task engagement through social interactions, I shall draw upon theories of tasks, motivation and social interactions and discuss their applicability to learner engagement, including the nature of discussion and learner preferences for online discussion. I shall then examine the role of the teacher presence through the lens of Community of Inquiry with all three categories consisting of social presence, cognitive presence and teaching presence. Finally, I will look at how technologies in general and social networking in particular can practically used in the investigation of task engagement and teacher presence.

2.2 Task engagement

2.2.1 Defining tasks

To understand what is meant by a task, it is important to distinguish the *task-as-workplan* (the task teaching materials) from the *task-as-process* (the actual performance of the task) (Breen, 1989). The task-as-workplan consists of the instructional materials that make up the task – typically some kind of verbal or nonverbal input and a rubic that specifies what outcome the learners are asked to achieve. The task-as-process is the activity that takes place when learners perform the task. As Ellis (2009, p. 223) suggests, the primary focus of a task should be on meaning and should have a clearly defined outcome. In order to complete a task, participants should use their own language and ideas to achieve a non-linguistic goal, that is that language is the tool that is used to achieve a predefined outcome. Therefore, tasks in the study are perceived as task-as-workplan. Students are assigned two types of tasks, namely vocabulary-related tasks and listening-related tasks. However, how to present tasks in a motivating way is

always a challenge for instructors.

Table 2.1: Criteria for defining a task-as-workplan (based on Ellis & Shintari, 2014)

Criteria	**Description**
The primary focus is on meaning	The workplan is intended to ensure that learners are primarily concerned with comprehending or/and producing messages for a communicative purpose.
There is some kind of gap	The workplan is designed in such a way as to incorporate a gap that will need to be closed when the task is performed. The gap creates a need to convey information, to reason or to express opinion.
Learners reply mainly on their own linguistic and non-linguistic resources	The workplan does not includes any presentation of the language needed to perform the task, although it may supply input that can be 'borrowed' during the performance of the task. Learners need to draw on their existing linguistic resource (potentially both L1 and L2) and their non-linguistic resources (e.g., gesture, facial expressions) for comprehension and/ or production.
There is a clearly defined communicative outcome	The workplan specifies the communicative outcome of the task. Thus, task accomplishment is to be assessed not in terms of whether learners use language correctly but in terms of whether the communicative outcome is achieved.

Ellis (2017) provides another definition related to tasks, where he provides a more detailed specification of the differences between *task-supported language teaching* (TSLT) and *task-based language teaching* (TBLT).

Table 2.2: Comparison of task-supported and task-based language teaching (Ellis, 2017)

	Task-supported language teaching	***Task-based language teaching***
Syllabus	Structural (i.e., a graded list of linguistic features to be taught)	Task-based (i.e., a graded list of tasks of task-types to be performed)
Attention to form	Directs attention to form	Attracts attention to form
Activity type	Exercises + tasks	Tasks only
Primary focus	Accurate use of target forms	Communicative use of language
Type of learning	Intentional	Incidental
Theory of language learning	Skill-learning theory	Interaction approach, usage -based learning
Educational philosophy	Transmission: learning -to-do	Experiential: learning-by-doing

According to Ellis's comparison, tasks in this study follow the pattern of task-supported language learning, where the learner's attention is directed to the specific target form with the primary focus on accurate use of the target form. In the study, the learners are made aware of what linguistic forms they are supposed to learn and so the learning that takes place is intentional (i.e., the learners are expected to remember new vocabulary and how to use it correctly).

In the current study, all the listening activities and Quizlet activities are generally called tasks. Because listening activities are difficult to keep track of, only Quizlet activities are taken into consideration in terms of data collection and data analysis. The listening activities will be touched in one of the discussion parts on motivation and autonomy section.

2.2.2 Task engagement

Student engagement is an undeniably important aspect of students' performance in education and hence, for a long time it has been a very popular theme in educational research and it still attracts attention of many recent research (Hong, 2008; Skinner, Kindermann, & Furrer, 2009; Helme & Clarke, 2001; Skinner & Pitzer, 2012; Christenson *et al*., 2012; Van den Branden, 2016; Philp & Duchesne, 2008, 2016; to name just a few). For example, an interesting study from Hong (2008) revealed there is a strong correlation between teachers' language use and students' engagement levels in the classrooms. This study identified a shift across school subjects, grade levels, streams as well as teachers' social variables, such as age, gender, experience, qualification, etc. However, the result is rather ambiguous on how the patterns among teacher's variables and students' variables impact or intertwist students' engagement. Moreover, this study only applied for primary and secondary school learners. In the current study, we would like to investigate the correlation between teachers' language use and students' engagement levels in the classrooms within university students.

To have deeper views on engagement for higher education learners, the following definitions are taken into consideration.

- Skinner and Pitzer (2012) defined engagement as "constructive, enthusiastic, willing, emotionally positive and cognitively focused participation with learning activities in school" (p. 22). In other words, there two main elements in this definition, that is emotional engagement and cognitive engagement.
- Christenson *et al*. (2012, p. 817) emphasized the integral part of engagement for learning: "Student engagement drives learning; it requires energy and effort; is affected by multiple contextual influences; and can be achieved for all learners." It can be acknowledged that intrinsic engagement from students themselves in a certain learning context is the core factor for the success of the learning.

- Van den Branden (2016) emphasized the teacher plays the crucial part in motivating students through well-designed tasks that are both challenging and closely matched to their needs. The author also acknowledged the need to involve students through tasks that are strongly suitable and achievable with support, and that inspire effort and sustainability.
- With a similar idea, Hattie (2012, p. 169) referred to teachers as "the major source of controllable variance" in an education system and as "the major players in the educational process" (p. 25). Another study from William *et al.* (1999) shows that the teacher plays a significant role in the development of students attributions.

At the level of activity, engagement refers to participation in a specific activity or task in class and the outcome pursued is learning. In the context of foreign (FL) or second language (L2) educational settings, language use and/or development are the expected outcomes. The term task here is used in a specific sense. As Ellis (2009) suggests, the primary focus of a task should be on meaning and should have a clearly defined outcome. In order to complete a task, participants should use their own language and ideas to achieve a non-linguistic goal, that is that language is the tool that is used to achieve a predefined outcome (Philp & Duchesne, 2016).

However, the fact is that some topics we teach are not likely to succeed in attracting students to involve even though it is their interest to acquire them. This is when motivational techniques related to how to *present* and *administer tasks* come into practice. For example, how instructors normally describe what students will be doing, what they will have achieved when they are finished and how these achievements will be evaluated. These are undeniably important teaching perspectives, but an inspirational educator should fulfil at least three further functions:

- Explaining the purpose and the utility of the task;
- Whetting the students' anticipation of the task;
- Providing appropriate strategies for doing the task (Dörnyei & Ushioda 2011).

In other words, to keep students engage in the tasks, instructors have to explain what the task is, how to do the task and why they should do the task with the provision of suitable strategies to do the task. Also, instructors' role is to make them excited about doing the task.

The current study will follow Philp and Duchesne's (2016) comprehensive definition. They defined engagement as a multidimensional concept that comprises cognitive, behavioural, social, and emotional dimensions of engagement among second and foreign language learners in the classroom. They also mentioned that engagement is the term frequently employed to talk broadly about learners' interest and participation in an activity, which is a construct closely related to motivation.

Different aspects of engagement have been proved in separated research. In the first dimension, *cognitive engagement* refers to processes such as sustained attention and mental effort (Helme & Clarke, 2001), proved in private speech and exploratory talk (Barnes, 2008; Mercer & Dawes, 2008), or in retrospective interviews (Early & Marshall, 2008). In the second dimension, *behavioural engagement* is typically described simply in terms of time on task or participation. Thus being "on-task" is synonymous with behavioural engagement (Philp & Duchesne, 2016). Other studies investigated behavioural engagement separately from other dimensional engagement, for example, Gettinger and Walter (2012) reported that "academic engaged time," is the amount of time that students are actively involved, predicts academic achievement, and engagement is directly related to learning outcomes. Or another example on behavioural engagement measured qualitatively via observation of participation and effort as well as teacher reports and student self-reports or interviews (Fredricks & McColskey, 2012). In the third dimension, *emotional engagement* presented in Yazzie-Mintz (2009) as "students' feelings of connection to (or disconnection from) their school— how students feel about where they are in

school, the ways and workings of the school, and the people within their school" (p. 16). Skinner, Kindermann, and Furrer (2009) described emotional engagement as motivated involvement during learning activities, including enthusiasm, interest, and enjoyment as primary factors of emotional engagement, and on the other hand, anxiety, frustration, and boredom as other factors of negative emotional engagement (disaffection). Moreover, Baralt, Gurzynski-Weiss, and Kim (2016) added purposefulness and autonomy as perspectives of emotional engagement. In the last dimension*, social engagement* is ultimately related to emotional engagement, especially among younger learners and adolescent learners where affiliation is a powerful social goal (Philp & Duchesne, 2008). Storch's (2002) patterns of interaction describes social engagement as having an impact on success of task-based interaction between interlocutors.

In a nutshell, from the above scholars' views, task engagement depends on various factors including the task itself, learner's engagement with a multidimensional construct as well as teacher's role. Furthermore, if we can understand engagement better, we are better equipped for investigating how to engage all learners (Philp & Duchesne, 2016). Learner's engagement in this study is perceived as how many Quizlet activities that students have done outside of class time.

2.2.3 Sustaining task engagement out of class

One of the primary issues which has been associated with sustaining learning outside the classroom has been learner autonomy. While it is unlikely that this is the only issue related to encouraging learners to engage in activities outside the classroom, the development of learner autonomy is an area that has attracted a great deal of attention of the past two decades or so (see Scharle & Szabo, 2000). Autonomy in itself, however, is a term that is not only difficult to define (Stewart & Irie, 2012), but it is also challenging to evaluate (see Benson, 2001). Setting autonomy as a fundamental purpose in educational settings, although it is an undoubtedly indispensable part, it might also be viewed as a confusing factor for both teachers and learners

themselves. As a result, a more reachable short-term goal would be thought to support learners to engage actively in tasks and activities not only in the classroom, but outside of the classroom as well.

A research on evaluation and assessment from the perspective of learner autonomy from Little, Dam and Legenhausen (2017) claim that learners regardless of age already understand what it is to be autonomous from their lives out of class time. They propose that the teacher's role is to trigger a capacity that learners already own to a greater or lesser level, make it clear to them, and assist them in developing and applying it into their own learning. In this sense, to maintain task engagement outside the classroom, students need to possess autonomy to some extent, taking control of their learning with the support of the teacher. With the same authors in the same theme but in a different aspect of learner autonomy, they compared the teacher's role in an autonomous learning environment and a traditional setting. The teacher in an autonomy classroom is unlikely to have less responsibility for maintaining control and support than teachers in traditional classrooms. But the focus and method of her control are multifaceted. She not only has to control and convey the curriculum requirements but also needs to manage and control the tools as well, especially when learners use the tools outside of classroom, along with assistance and support for learner's learning process.

However, it is explicitly unreasonable to require instructors to facilitate the development of learner autonomy if learners themselves do not have a clue what it is to be an autonomous learner (Little *et al.*, 2017). This explains why in some educational contexts, there is little success in autonomous level, even though the instructors try as hard as they can to convey the content to learners.

With the continuous increase of using synchronous multimodalities for language teaching, which increase the educational opportunities; however, there has been little research on how these uses support student engagement in instructional activities (Kozlova & Zundel, 2013). Most studies focus on technical advantages and disadvantages (Niño, 2009; Tatiana Dina & Ileana Ciornei (2013), task-based instruction to foster learner communication skills (Lee, 2002), audio conferencing (Hampel & Hauck, 2004), video conferencing (Glisan *et al.*, 1998; Yang & Chen, 2007) and teachers' self-assessment (Swain, 2006).

Also, engagement in online tasks outside of class is dependent upon many different elements. The first element is sufficient training in the tools, that is, technical training (Stockwell, 2012), in which the teacher has to train learners how to use the tools. The second and third element are skills in developing strategies for use including strategic and pedagogical training. Strategic training refers to training learners how to use the tools for learning the language. Pedagogical training is defined as explaining why students need to use the tools for learning and how beneficial the tools are for learning the language (Romeo & Hubbard, 2012).

Social engagement is another aspect that is particularly important to language learning, given the opportunities that social interaction offers for language practice (Philp & Duchesne, 2016). In the current study, students are encouraged to join the class interaction about the tasks they have done, so they can share with other students and receive feedbacks from the instructor. With the hope of the instructor that forming the social interaction will help the learners engage more in the tasks outside of class because social interaction may provide opportunities to be exposed to other ways of thinking about a problem and to elaborate thinking (Webb, 2013).

In the current research, a basis understanding of sustaining task engagement outside of class is how actively students do the desired and encouraging tasks beyond the official class time with

the support and encouragement from the teacher. The more they do the tasks, the more they engage into the learning process with desired outcomes including higher grades in paper-based quizzes and both student and teacher satisfaction.

2.3 Motivation and language learning

2.3.1 Motivation and language learning

Motivation is one of the primary determining factors of second or foreign language (L2) learning achievement (Dörnyei, 1994). The last few decades have witnessed a significant number of investigations on the nature and the role of motivation in instructional process (Dörnyei, 1990, 1994; Crookes & Schmidt, 1991; Wang, 2009; Ushioda, 2011; Kormos *et al.*, 2011; Busse & Walter, 2013; Qui Li, 2014; Lam, 2018 to name a few).

One interesting finding from Kormos *et al*. (2011), which followed Dörnyei's (2005) motivation theory is that four learner-internal factors including goals, affective reactions (attitudes), self-guides, and self-efficacy beliefs closely interconnect with each other. However, differing from Dörnyei (2005)'s motivation model, they argued that in their results, the participants didn't show any relation between ought to L2 self with motivated learning behaviour. Instead, the external elements such as learners' social, cultural and educational environment have a great impact on the components of learner internal motivation. Even students are motivated in a certain period of time, motivation can change anytime with decreasing levels of intrinsic motivation and self-efficacy beliefs (Busse & Walter, 2013). In their practical research, they also pointed out pedagogical suggestions for how to deal with decreasing motivation.

The current study will follow the motivation model from Dörnyei (2005, 2009), which illustrated the "L2 Motivational Self System" as a comprehensive summary of previous studies on the main dimensions of language learning motivation including Ideal L2 Self; Ought-to L2 Self and L2 Learning Experience (see the theoretical background chapter for more details of this theory). The fundamental and transparent requirement for the motivational capacity of future self-guides is that they need to exist (Dornyei & Ushioda, 2009). A research shows that people with positive possible selves can lead to effective performance more easily than those do not (Ruvolo & Markus, 1992); however, as in Higgin (1987)'s self-discrepancy theory, he suggests that different people refers to different self-guides which they are especially motivated to meet and not everyone is expected to possess all of the self-guides - some may possess only ought to self-guides, whereas others may possess only ideal self-guides. Having said this to reveal the absence of sufficient motivation in many people. Furthermore, even if the self-image does exist, it may be difficult to be effective without having an adequate level of elaborateness and vividness (Dornyei & Ushioda, 2009).

A constructivist view of motivation proposed that each individual is motivated differently depending on social and contextual influences as well the whole learning situation. These will include the whole culture and educational context and the social situation, as well as significant other people and the interaction between the individual and others (Williams & Burden, 1999). In other words, with each learner's preference, some may be motivated by learning goals, others may be motivated by achievement tasks or other different factors. Understanding learners' motivation will be of any help for teachers to create suitable teaching and learning strategies as well as appropriate teaching and learning environments. In other words, teaching based on individual learning styles is an effective way to ensure students' achievement and motivation (Boström & Lassen, 2006)

2.3.2 Autonomous learning (Self-Directed Learning)

According to Stockwell (2012), autonomy is a combination of motivation and skills. Lack of either of these will not lead to autonomous learning. Another research in an online distance education claimed that it is necessary to obtain a high level of self-direction to succeed in online learning environment (Shapley, 2000). In other words, when students can take control of their students, they understand their own learning, actively engage in the learning process and are able to lead their learning process in a desired outcome.

Various researchers have demonstrated different perspectives on SDL over the past decades (Caffarella *et al.*, 1986; Garrison, 1997; Glenn, 2000; Kop & Fournier, 2010). However, three models were selected for further description, as they appear to be comprehensive representations of SDL (Song & Hill, 2007). The primary elements related to each model are summarized in Table 3.

Table 2.2. Perspectives on Self-Directed Learning (Song & Hill, 2007)

Perspectives	Description	Model		
		Candy (1991)	Brockett & Hiemstra (1991)	Garrison (1997)
Personal Attribute	Moral, emotional, and intellectual management	• Personal autonomy • Self-management	• Goal orientation (personal attribute)	• Self-mangement (Use of resources) • Motivation
Process	Learner autonomy over instruction	• Learner control • Autodiaxy	• Process orientation (learner control)	• Self-monitoring
Context	Environment where learning takes places	• Self-direction is context-bound	• Social context: role of institutions and policies	

Candy's Four-Dimensional Model

Candy (1991, p. 23) concluded that SDL included four dimensions: "'self-direction' as a personal attribute (*personal autonomy*); 'self-direction' as the willingness and capacity to conduct one's own education (*self-management*); 'self-direction' as a mode of organizing instruction in formal settings (*learner-control*); and 'self-direction' as the individual, non-institutional pursuit of learning opportunities in the natural societal setting' (*autodidaxy*)" (p. 23). Given that Candy's model was developed pre-Internet, it was not designed with online learning contexts in mind, but the applicability to online contexts is obvious.

Brockett and Hiemstra's Personal Responsibility Orientation Model (PRO)

Brockett and Hiemstra (1991) built SDL from two main factors: process and goal. In the first factor, SDL is perceived as a process "in which a learner assumes primary responsibility for planning, implementing, and evaluating the learning process" (p. 24). In the second factor, SDL is observed as a goal in which "a learner's desire or preference for assuming responsibility for learning" (Brockett & Hiemstra, 1991, p. 24). Different from Candy's model, Brockett and Hiemstra (1991) combined both the process and personal attribute perspectives in the model. They also discussed the role of institutions and policies as the social context in SDL. However, in Brockett and Hiemstra's model, the social context is set boundaries as various physical institutions where learning takes place, such as community colleges, libraries, and museums. In today's educational environment, where virtual learning continues to undergo continuous growth, a focus only on face-to-face settings is rather limited (Song & Hill, 2007).

Garrison's Three-Dimensional Model

Like Candy and Brockett and Hiemstra's models, a personal attribute as well as a learning process are given as the perspectives of SDL in Garrison's model. According to Garrison (1997), SDL includes three dimensions: self-management, self-monitoring, and motivation. In instructional environments, self-management means that learners know to use learning resources within the learning context. Garrison's (1997) model drew our attention on resource use, learning strategies use, and motivation to learn. Garrison defined that self-management allowed learners to self-control the learning context in order to achieve their learning purposes. He also explained that learner control did not mean independence, but rather collaboration and interaction with other people within the context. Like Candy (1991), as well as Brockett and Hiemstra (1991), Garrison (1997) also emphasized self-management of resources in a given context. However, the role of context was somewhat ambiguous in Garrison's (1997) model and the dynamic interaction between learning context and SDL was not explicit (Song & Hill, 2007).

From the three models above, one factor that either lacks or superficial is the explicit learning context. Also, this study is looking for SDL in online interaction. Therefore, this study will follow Song & Hill (2007)'s a conceptual model for understanding SDL in an online context (see Figure 2.1). The model formed SDL as a personal attribute and a learning process as clarified by the above scholars in the literature of SDL. Furthermore, they added a third dimension - the learning context - to reveal the impact of environmental factors on SDL, particularly in online context.

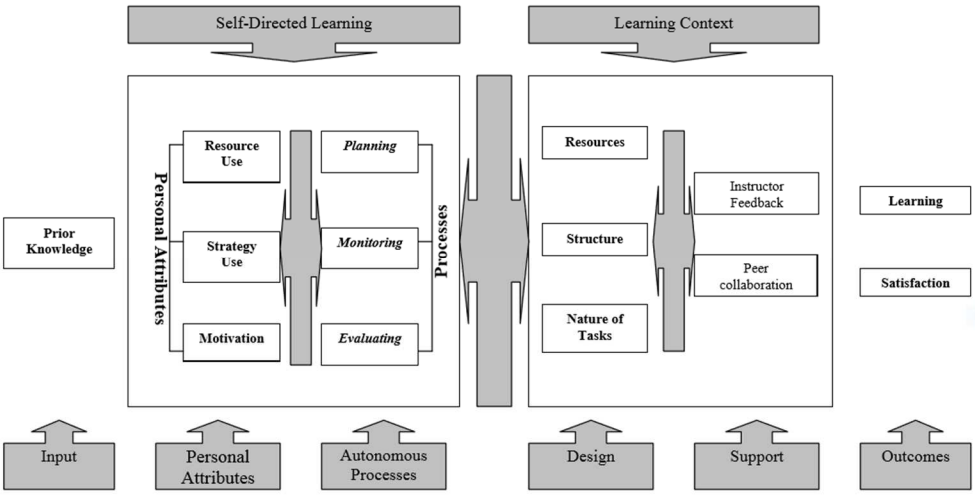


Figure 2.1. A Conceptual Model for Understanding Self-Directed Learning

(Song & Hill, 2007)

Below are the characteristics of Song & Hill (2007)'s model

Personal Attributes

Personal attributes focus on learners' motivations for and capability of taking responsibility for their learning (Garrison, 1997; Benson & Voller, 2013; Little *et al*., 2017). Personal attributes also include resource use and strategy use, together with their prior knowledge of the content area and prior experience with the learning context.

Processes

Process refers to learners' autonomous learning processes. Specifically, learner autonomy is primarily designated in the process of planning, monitoring, and evaluating one's learning (Moore, 1972; Ushioda, 2011). Learner autonomy in learning processes is viewed as a continuum (Candy, 1991; Ushioda, 2011). Song and Hill (2007) further explained that in the autonomous learning processes, depending on the level of learner autonomy, a learning experience can range from an instructor lecturing 100% of the class time (no learner control) to

a student taking charge of the learning process in an independent study experience (almost complete learner control).

Context

Context refers to educational settings' factors and how those factors have an impact on the learner's level of self-direction. There are various factors in a learning context that can impact a learner's SDL experience. According to the model, there are design elements and support elements. Design elements include the resources, structure and nature of the tasks in the learning context. These resources could be comprised in the specific learning context and could be designed and planned by the instructor as instructional support. Another set of elements in the learning context that have impact on a learner's SDL is the support in the learning context. The support can come from the instructor's feedback or peer collaboration and communication. For example, constructive and informative feedback from the instructor can facilitate learners' SDL, but simple judgmental feedback such as "right" or "wrong" may lead to learners to trying to figure out what the instructor wants instead of what they can make sense of when they are learning.

In summary, the model reveals the interactive relationship between the learning processes and personal attributes along with the addition of the online learning context and how the learning context not only influences the way learners plan, monitor, and evaluate their learning (process), but it also has the potential impact on how a learner becomes motivated to learn, and how he or she uses various resources and strategies to accomplish learning in the specific learning context.

2.3.3 Promoting motivation for out-of-class learning

Maintaining motivation during class time is already difficult and how to promote motivation outside of class is even more than a challenge for instructors in language learning settings. Vandergriff (2016) made a remark that even though much of existing studies into networked language learning is limited to elicited data in formal language-settings, there is comparatively little attention into language learning outside the classroom and how we integrate it with motivation and learner autonomy.

Research indicates that motivation to learn in an online learning context may be difficult due to the easy-to-procrastinate nature of online learning (Elvers, Plozella & Graetz, 2003). For example, it can be easy to hide in an online education setting (Song *et al.*, 2004). A learner can log in the online course for live chats or presentations (synchronous learning) with her/his name showing on the participants' list, yet, he or she may be surfing the Web or participated in other activities rather than actively engaged in the interaction. Even when learners do participate, their motivation to convey in-depth thoughts and ideas may be low. Another example in asynchronous bulletin board discussions, learners may be posting messages in a certain number of postings simply to meet the course requirement. This does not mean they are actually engaged in meaningful conversation (Biesenbach-Lucas, 2003).

One more suggestion for meaningful interaction to occur in online environments, learners need to be motivated to contribute cognitive deep messages (King, 2002). In other words, having appearance in the online conversation without thinking or presenting ideas does not lead to acquire meaningful knowledge. Furthermore, Reinders and Hubbard (2013) proposed that if students are not "working with teachers, tutors or other resources (e.g., computer programs) to

help them become autonomous and…interested and motivated to become autonomous" (p. 366), CALL affordances may be a constraint for them.

Another challenge to motivation in online learning relates to procrastination according to Elvers, Polzella, and Graetz (2003) is that it is easier to procrastinate in an online learning situation as compared to a traditional face-to-face classroom mainly because online classes often do not provide strict schedule. In a face-to-face class, although learners may procrastinate, the compulsory physical presence in each lesson exposes them to the materials on a regular basis. However, in an online situation, learners may not engage in course-related reading until the last minutes (Elvers, Polzella, & Graetz, 2003). Therefore, online learners need to possess motivational strategies to be successful in online learning context, especially, online learning context beyond the formal class time.

2.4 Learning Communities

Studies into learning communities have tended to focus on communities of practice, which is a group of people that come together to interact with one another on common concern or passion (Mercieca, 2017). Communities of practice are not new but have been transformed by developments in technology that have opened them up to far more diverse participation (Wenger, McDermott, & Snyder, 2002). It is not surprising that these discussions have also spread into educational contexts, and although studies into online learning communities thus far have focussed more on professional development (e.g., Hollins-Alexander, 2013) or learning of content rather than the language itself (e.g., Lee, 2014), there is a slowly emerging body of research that also explores online virtual communities for language learning (e.g., Barnes, 2018). The purpose of this study is to explore the nature of online learning communities

for language learning, considering the roles of both teachers and learners in these communities (e.g., Salmon, 2011; Fuchs, Snyder, Tung & Han, 2017). The study considers key concepts such as teaching presence, social presence, and cognitive presence in communities of inquiry (CoI) (see Garrison, Anderson & Archer, 2000; Swan & Shea, 2004; Garrison, Cleveland-Innes & Fung, 2010), and how these relate to learner engagement in both the community itself and in tasks and activities that are the object of discussion in the community. It continues by examining the experience in virtual learning communities from the role of the learner (Hiltz & Shea, 2004) as well as the group dynamics in these communities (cf., McConnell, 2006), and discussing the pedagogical implications of research into learning communities.

Also, in order to succeed in online instructional situations, it is the intertwisted role of a skilled teacher and engaged learners in a social and instructional environment that promotes and supports learning (Meskill & Anthony, 2010; Smith & Mehta, 2013). In online learning setting, the learning communities play a crucial part to connect members together. For example, learners can benefit from interacting with each other and with the teacher who can provide the tasks, prompts, cues, leads, instructing, feedbacks, guiding, and so on as well the structure, motives and supportive context. The assistance from others and from the teacher make learning environment enjoyable and beneficial for all members (Meskill, 2013).

2.4.1 Collaborative learning

Collaboration is perceived as a crucial part of cognitive development since cognition and social context cannot be segregated (Garrison, Anderson, & Archer, 2000). This concept can be explained according to Dewey (1959) “that the educational process has two sides: one psychological and one sociological; and that neither can be subordinated to the other or

neglected without evil results following" (p. 20). For Dewey, educational setting is a collaborative reconstruction of experience, in which “Collaboration is an approach to teaching and learning that goes beyond simple interaction and declarative instructions. Collaboration must draw learners into a shared experience for the purposes of constructing and confirming meaning. Realizing, understanding and creating knowledge is a collaborative process” (Garrison, Anderson & Archer, 2000, p. 95). In a nutshell, collaborative learning is a process of building a constructive community in which members learn from each other, share experiences, gain new knowledge, and achieve quality learning outcomes.

Kessler (2013) refers to collaborative learning as collaborative culture or participatory (collaborative) culture which has changed the way we interact with each other as well as the way we build up reality. He also mentioned the great range of opportunities that the participatory culture brings into language teaching and learning as well as suggestions to avoid several potential threats. In other words, it is fundamental point to acknowledge the equal responsibility and opportunities between the teacher and learners in the contribution of collaborative learning process. All members in the interacting cultures are obligated to play an active role in defining these participatory cultures with their own needs and purposes. However, this does not mean that all participatory members have to contribute in a productive or meaningful way, instead they need to prepare for this potential platform to create and manage the collaborative context to foster to the fullest of its perspectives.

McGonigal (2013) suggested collaborative gaming with its distinctive perspectives, including goals providing players with sense of purpose; rules pushing them to explore their own possibility and fostering creativity and critical thinking; feedback system telling player how achievable their goals are and serving as motivation to keep playing; and voluntary participation established as a common ground that all members willingly accepts the goal, the rules and the

feedback and collaboratively work together. We can apply this gaming design and construction into educational settings' syllabus or other fields, which inspire to increase participation and motivation (Kessler, 2013).

In a similar fashion of collaborative learning, there are a variety of investigations into different platforms. For example, Sun and Chang (2012) explored that collaborative dialogues on blogs enhance authorships and academic writer′s identity as well as reconstruct knowledge about academic writing. Thanks to reflective discussion through collaborative listening activities, the students gained high intrinsic motivation and understood the use of listening strategies (Liu, Cheng & Hwang, 2018).

Pargman, Nouri & Milrad (2018) defined collaborative learning as an effective strategy to promote learners′ achievement, higher-order thinking, argumentation and metacognition. However, through their investigations in the collaboratively tablet-mediated classroom, they suggest new perceptions into the modern aspects of collaboration in the mobile learning context. The findings′ study reported that in order to gain a deeper understanding of collaborative mobile learning in schools, it is crucial to understand not only how mobile devices work affectively in collaborative learning environments, but also how these collaborative instruments foster and mediate collaborative learning contexts with the assistance of the teachers′ and learners′ multiple instrumental mediations. Moreover, the study implied that collaborative activities are designed for learners' engagement and participation. Specifically, collaborative activities used the online discussion forum lead to more communication and more social interactions (Sun, Lin, Wu, Zhou & Luo, 2018).

However, not all scholars agree with the optimistic aspect of collaborative learning. For instance, Carr (2011) argued that the quality of our cultural content in the participatory culture

decreases because we allow non-experts cooperatively share in the same context. In response to Carr's negative statements about collaborative learning, Weinberger (2012) also claimed that one of the most significant aspect of this participatory constructive culture is to lessen the dependence on experts. Collaborative content creates an environment that allows the contributions of participants with various characteristics to interact, share and learn. These new contexts not only foster greater encouragement for participation, but also suggests a necessary space for caution and care (Kessler, 2013).

According to sociocultural perspectives, learning process is viewed as socially mediated and occurred within the zone of proximal development defined as "the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978). In other words, more capable peers within collaborative communities play an integral part in the participants' study development process. Also, it is worthwhile to consider the learner's personal world (reflective and meaning-focused) as well as the shared world (collaborative and knowledge-focused) in order to make learning experience purposeful and structurally educational (Garrison, Anderson, & Archer, 2000).

In the current study, the instructor creates a collaborative learning environment through online social context with the hope that learners will share their learning experiences and actively participate in online discussion socially and cognitively with the support from the teacher.

2.4.2 Learner communities

For over two decades, the concept of a 'community of learners' has attracted much attention in educational settings (Rogoff, 1994; Engel & Conat, 2002; Boersma *et al.,* 2010; Inman, 2011;

Sewell *et al.,* 2013; Mair, 2016; Laverick, 2018). This concept has a good reputation could be from the fact that it is a pedagogical concept that combines both a set of specific education goals and the condition in which these goals can and should be achieved. This can explain why the community of learners' concept has been a dynamic player in the design of learning environments (Boersma, Dam, Wardekker, & Volman, 2016).

With the advances of digital worlds along with powerful online tools with which learners can construct their understanding of content with guidance and support from peers and instructors, the venue potentially serves the educational community well (Meskill, 2013, p. 14). It is observed that within a community of learners, our students not only are able to constitute a sense of membership that can be an important step toward engaging and motivating students in the process of cultural digitization (Beer & Burrows, 2007; Mills, 2011), but also can establish their own voice, present their identity and contribute in distinctive ways within these contexts (Kilmanova & Dembovskaya, 2013; Meskill, 2013). Moreover, Meskill (2013) also reports that after all, learners are engaging with others and exchanging information within their communities beyond formal classes that they take advantage of and that influences their development in the subject area. In a similar vein, Thorne *et al.* (2009) propose that online discussion taking place outside of the L2 classroom often "involves extended periods of language socialization, adaptation, and creative semiotic work that illustrate vibrant communicative practices" (p. 185).

There are a number of studies on exploration of learner community through Massive Online Open Courses (MOOCs), which can build pedagogical principles, as well as can create large scale communities of learners who collaborate, interact and discuss learning materials and activities (Clarà & Barberà, 2013; Gallagher & Savage, 2016). Furthermore, through online discourse community, learners not only are able to publish and distribute their work to a wider

range of audiences, but also take authorships over their own learning (Bloch, 2007). This sense of authorships over the learning process is one of the main factors drawn a great deal of attention by many researchers and educators when discussing language learner autonomy and promoting collaboration and community (Benson, 2001; Benson & Voller, 2013; Fuchs, Hauck, & Müller-Hartmann, 2012; Fuchs & Snyder, 2013).

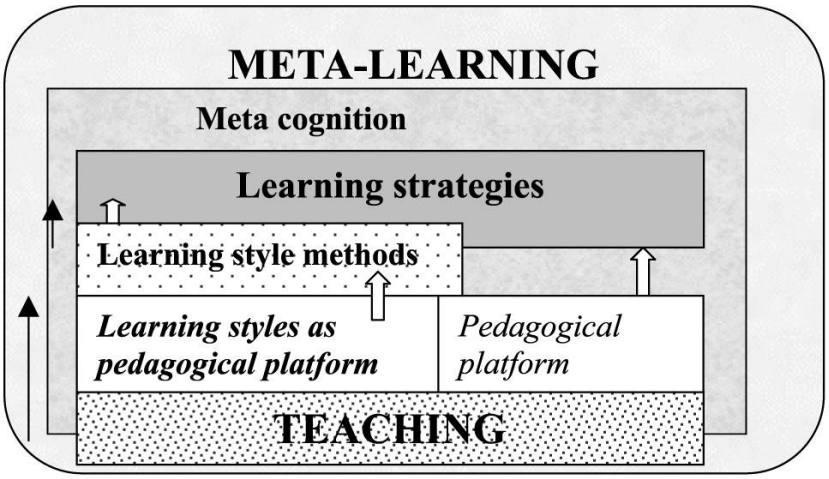
Learner communities also can be seen as the sense of social presence according to Varli (2013). In his study, learners participated in a learning community through 3D virtual worlds (Second Life) in which not only develop the sense of social presence but also support collaboration and social interaction experiences. In other worlds, learners can experience activities with reality-like situations. From this perspective, language learning becomes more like a process of involvement in action and participation, rather than the enforcement of prescriptive rules. In the same perspective, Meinel and Schweiger (2016) described virtual online learner community as having a strong focus on community building with its unique functions lying in their open accessibility and their incorporation of learning content with social media, which has motivating impacts to enforce e-learning activities. Understanding the features of the social interactions that maintain learning in a community allows participants to expose communications between external and internal situations that create learning opportunities. The study also helps educators and mentors working within a community of learners to insightful shape and provide designs of collaborative talk that enhance specific forms of meaningful learning in practice (Rachamim & Orland-Barak, 2016).

A community of learners in the current study is established through an online social networking site in which students can participate in groups or individuals. Learners in this community can share their learning materials, discuss their learning process or socially build up the sense of

membership as well as receive support, guidance and direction from the teacher.

2.4.3 Meta-learning (discussing one's learning with others)

Meta-learning is described in Figure 1 as a broader cognitive operation comprised of both how you think and learn about your own learning. Reflection on one's thinking about learning leads to an awareness of learning which may build the foundation for meta-leaning. In other words, it is leaners that reflect and experience of one's own learning. Even more important may be the pervasive knowledge that one is a learning individual with strengths and possibilities for individual development and transformation (Lassen & Boström, 2006).



Note: "Pedagogical platform" could be any pedagogical platform

Figure 2.2. The relationships among teaching methods, learning styles, learning strategies, meta-cognition and meta-learning (Lassen & Boström, 2006).

Following the suggested Meta-Learning Model from Lassen and Boström (2006), there are other factors that constitute meta-learning, therefore, in order to understand meta-learning process, the aspects including teaching or teaching methods, learning styles, learning strategies and meta cognition are taken into consideration.

The first factor of teaching, good teaching is making most students to use the higher cognitive level processes that the more academic students use simultaneously. However, what one sees as good teaching, and how one teaches, depends on what definition of teaching one has (Biggs, 1999b). There has been a variety of research on concepts of teaching (e.g., Samuelowicz & Bain, 1992; Nunan, 1999; Prosser & Trigwell, 1999; Biggs, 1999a; Ramsden, 1991, 2003). The problem is that students have different learning styles that may or may not be suitable with what they should do at school, however, the teaching challenge is to change their habitual way of learning, not to see it as an obstacle to teaching them (Biggs, 1999).

Prosser and Trigwell (1999) proposed two concepts, based on two teaching strategies: teacher-focused and student-focused. Teacher-focused strategies are transmission theories of teaching; that is knowledge is perceived as being conveyed from expert teacher to inexpert learner. But, in this sense, the focus is on what the teacher does. The other strategy is student-focused strategies in which the focus is on conceptual change in students' acknowledgment of the world, and it is what students do to understand the transmitted knowledge that is important, not what teachers do. In response to this concept, Biggs (1993) argued that learning outcomes occur in a whole complex of factors: fixed student-related factors such as ability; teaching-related factors such as curriculum, and methods of teaching and assessing; and the approaches to learning that students use while engaging in any certain task to achieve a desired outcome. All these elements closely link each other, establishing an interactive system. In other words, it is difficult to separate teaching from learning. While teaching may lead to learning, learning can take place without teaching. Furthermore, teaching does not necessarily lead to either learning or meta-learning. In this perspective, in order to have a higher capacity in facilitating a meta-learning process, it is likely to combine both a developmental level of the learner and also consistent

methodological approaches from the teacher, which perceived as teaching based on the learner's preferred learning style (Lassen & Boström, 2006).

The second factor in meta-learning process is learning style, which is defined as "the way each learner begins to concentrate on, process and retain new and difficult information" (Dunn *et al*., 1994, p. 2). However, every individual has his or her own learning styles which strongly depend on cultural and educational context (Gragon & Wagner, 2004; Lassen & Boström, 2006; Zapalska & Brozik, 2006; Zajac, 2009). However, by discussing the problem with their peer students and suggesting possible explanations or solutions, they can understand the problem (Loyens & Magda & Rikers, 2008). Dunn & Griggs (1995) proposed that students whose instruction is not responsive to their learning styles gain dramatically less well than learners whose instruction is responsive to their learning styles. In other words, if the teaching matches the student's learning-style preference, it is more likely to lead to successful learning outcomes and trigger motivation.

The other factors in meta-learning process are learning strategies and meta cognition. Learning strategies is described as the way students involve in how to deal with specific learning tasks (Coffield *et al.*, 2004), however, McCabe (2011) proposes that undergraduates are largely unaware of several specific learning strategies. In other words, to lead to a successful learning outcome, it is a need for learners to possess some particular studying strategies; however, not all students are able to define what their learning strategies are. Self-regulated learning strategies are comprised of time management, metacognition, critical thinking, and effort regulation have significant positive correlations with academic achievement (Broadbent & Poon, 2015), metacognitive strategies defined as the awareness to monitor, plan and take control of learning (Yukselturk & Bulut, 2007) and mind mapping known as text-learning strategies

reflecting the macro structure of the text together with more precise relationships among related text units (Merchie & Keer, 2016) are considered as efficient learning strategies closely related to meta learning. They directly lead to learning outcomes in terms of knowledge, understanding, skill, etc. (Vermunt & Vermetten, 2004).

In sum, understanding one's learning styles, learning strategies, metacognitive strategies along with pedagogical teaching methods seem to lead to learning success. To this extend, meta-learning can be perceived as a belief relating to performance abilities to reach the target outcomes. It is learners that believe in their own abilities and understand that they can have an impact on their aimed conditions (Lassen & Boström, 2006).

2.4.4 Teaching presence in learner communities

The Community of Inquiry (CoI) framework (Garrison, Anderson, & Archer, 2001) claimed that learning occurs in a CoI as a result of the interaction between three crucial factors: social presence, cognitive presence, and teaching presence. Teaching presence is a means to an end-to support and enhance social and cognitive presence for the purpose of achieving educational outcomes (Garrison *et al*., 2000). Social presence is defined as "the ability of learners to project themselves socially and emotionally, thereby being perceived as 'real people' in mediated communication" (Garrison & Arbaugh, 2007, p. 159). Cognitive presence is described as the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse (Garrison, Anderson & Archer, 2000). However, there are some conflicting and mixed results from the previous research. Earlier research based on highly motivated students with mostly graduate courses or specialized in English courses (Garrison, Anderson & Archer, 2000; Garrison & Cleveland-Innes, 2005; Lee, 2014). Ke (2010) and Diaz, Swan, Ice and

Kupczynksi (2010) found that social presence was overemphasized. But, Lee (2014), found that social presence to be the main factor leading to a successful educational experience. Meanwhile, Shea and Bidjerano (2009) emphasized the importance of teaching presence over social presence. Whereas Garrison *et al*. (2000) claimed that cognitive presence is fundamental to success in higher education. Annand (2011) proposed that social presence does not impact cognitive presence in a meaningful way, but the combination of teaching presence and social presence elements are necessary to lead to successful learning process.

How to sustain learning outside the classroom has long been a challenge for teachers. We have preliminary evidence to suggest that learners are more likely to engage in tasks and activities if they see a clear relationship between what they undertake and their learning goals, but learners also need to feel that there is sufficient presence from the teacher with appropriate feedback (Heift, 2004). Based on the discussion above, there is evidence that from a theoretical perspective social networking appears to provide many of the conditions necessary for supporting learning (Lomicka & Lord, 2016).

Roles for teaching presence

Teaching presence consists of three subcategories, namely design and organization, facilitating discourse and direct instruction (Anderson *et al.*, 2001). There is a variety of research about teaching presence in terms of design and organization (Arbaugh & Hwang, 2006; Wisneski, Ozogul & Bichelmeyer, 2015; Rubio, Thomas, & Li, 2018) and facilitating discourse (Laurie, Snyder & Terrell, 2010; Torras & Mayordomo, 2011). However, very little research reaches to the level of direct instruction, which requires a high level of instructor immediacy (Arbaugh, 2001; Richarson & Swan, 2003; Baker, 2004) to be effective (Garrison & Arbaugh, 2007).

The first category of teaching presence is planning and designing the structure and process, building up discussion and evaluating the course (Arbaugh & Hwang, 2006). Swan (2003) proposed that clear clarification and consistency in course design and organization along with an engaged instructor are likely to lead to increased learning.

The second category of teaching presence is the facilitating discourse. Learners are supposed to engage in the discussion in order to gain knowledge from the course materials provided by the instructor. The role of teaching presence in this sense refers to not only facilitating interaction, but also sharing meaning, exploring the similarities and differences and reaching up a common understanding for desired learning outcomes (Wisneki *et al*., 2015).

The last element of teaching presence is the direct instruction, which is known as the most difficult reachable perspective of teaching presence and considered as the intellectual and scholarly leadership of the instructor shared with the students (Anderson *et al*., 2001; Wisneski *et al*., 2015). This element requires the instructor not only provides explanatory feedback and assessment of student performance, but also diagnoses student misunderstandings to guide them to necessary materials excluding textbooks or handouts distributed in the formal classroom.

However, Berge (1995) added one more category into teaching presence, that is "technical" support role. This will require more of the instructor's responsibilities at the beginning when he/ she first introduces the tools. We understand that providing technical support to learners is an integral part of the teacher in this digital world, however, its importance and assistance will decrease as learners become more skilled and experienced and as the tools become more easy-to-access.

Teaching presence is perceived to be related to students' satisfaction (Garrison & Cleveland-Innes, 2005; Garrison & Arbaugh, 2007; Shea & Bidjerano, 2008; Rourke & Kanuka, 2009; Turula, 2017); based on learner perceptions of the teacher's feedback, direct instruction and discourse facilitation, which makes the course a success (Kupczynski, Ice, Weisenmayer & McCluskey, 2010). However, these authors also mention that learner level plays a crucial part, for example, it is more beneficial for more advanced learners when the teacher facilitates online interaction and fosters them to explore new conceptions. Meanwhile, less proficient students think that the excellence of teaching presence in terms of direct guidance have an impact on their successful learning outcomes.

In the current study, the instructor would like to see the impact of teaching presence and social presence into cognitive presence and whether or not students are able to feel teaching presence and social presence to assist them in task engagement, which may lead to cognitive presence or lead to sufficient learning process. Moreover, the study would like to discover various preferences on teaching presence, social presence and cognitive presence from different groups and individuals. However, only subcategories of teaching presence elements in CoI framework are analysed in detail.

2.5 Language teaching and learning through technology

2.5.1 Technologies for language learning

Although technology is said to be useful for practice and technological materials are able to reinforce language education, the greatest potential function of Web 2.0, the social web, seems to be its ability to enhance interaction between learners and other users (Blake, 2013). If some digital tools are helpful in connecting people, then they are likely to be also good at enhancing

interaction between interlocutors in language-learning contexts (Vandergriff, 2016).

Vocabulary is the dimension of language that has been most closely related to technology (Cobb & Horst, 2001). With advances in technological developments, there has been an increasing amount of research into how technology can support language learning, especially in different aspects of learning vocabulary such as pronunciation, reading and writing and so forth (e.g., Dreyer & Nel, 2013; Horst, Cobb, & Nicolae, 2005; Cobb, 2012; Clark, 2013). One of the benefits of using technology can be seen in Clark's work in 2013, in which technology can be used as an engaging, supplementary tool to foster vocabulary learning for English language learners (ELLs). His work focused on developing oral language skills to develop vocabulary and incorporate technological tools. Whereas Cobb's study (2012) is about using technology to practice writing words down, which becomes widespread in a language because it determines the vocabulary that will have to be learned as well as offering the means for learning it.

It is becoming evident that mobile learning has established its place within teaching and learning practice, and the volume of work produced is reflected in Burston's (2013) overview of mobile-assisted language learning research from 1994 through to 2012. One plaguing feature of research into MALL has been, however, that much of it has taken place with mobile devices has focused either on their use in controlled classroom environments or has tended to focus on learner attitudes to learning through mobile devices (Stockwell, 2016). Research that has looked at what happens outside the classroom, however, has shown that learners tend to be less willing to engage in activities than is indicated through responses collected from surveys and questionnaires taken prior to actual usage. There has been research emerging in recent years, however, that look at how to develop learner autonomy through mobile devices, investigating

how strategy training can lead to enhanced engagement (e.g., Stockwell & Hubbard, 2014) and through pairing up with others (Garcia *et al.*, 2017), as discussed below.

How to choose appropriate technologies for language learning plays an important in learning process. That is, most technologies, if skilfully applied, effectively foster to meet a variety of educational needs and gain desired learning outcomes. However, it is also undeniable that the successful application of technologies in learning depends on not only the skill of the user but also the tools used, and that technology "inevitably shapes the way people relate to each other" (Schrage, 1995, p. 137). Moreover, Wastiau *et al*. (2013) proposed that learners have the highest frequent use of digital learning resources when they are instructed by teachers who possess efficient digital skills, who use the technologies with responsibility (Hoskins and Crick, 2010)

Based on the fact in Japan with more access to the Internet from smart phones than PCs in Japan (Wrigley, 2014), also in Japanese universities, smartphone ownership reached almost 100% (Stockwell, 2012), hence, teachers have seen the potential for mobile technologies for teaching and learning languages (Pegrum, 2014). But, even though learners see the potential of using mobile devices outside of class time, this is not reflected in actual usage (Petersen, Divitini, & Chabert, 2008; Stockwell, 2010; Kim *et al*., 2013). In addition, there are other logistical issues such as class time alone is unlikely to be sufficient to provide this training (Stockwell & Hubbard, 2014), hence, it is a need to engage students in mobile learning with potential of SNS to support out-of-class learning (e.g., Lomicka & Lord, 2011; Tran, 2015, 2016). However, maintaining motivation with technology is always a challenge (Stockwell, 2013), students always have expectations regarding technical support (Lai, Yeung & Hu, 2016) and students want a greater sense of the presence of the teacher (Guichon & Wigham, 2016). Therefore, there are suggestions for specific learning strategies with technology (Romeo & Hubbard, 2012),

that is, technical training in how to use and control the tools for both general and specific learning purposes; strategic training refers to what to do to support tasks in order to reach to learning objectives; and pedagogical training provides the fundamental concepts to help students understand why they need to use these techniques and procedures to achieve their learning purposes.

Another factor in terms of using technology for language learning is that learners' particular experiences with using technology in their everyday lives will naturally have an impact on their acceptance and comprehension of technology for language learning (Stockwell, 2012a). For example, if leaners are used to using a certain program to interact with their friends and family, which seems potential to consider this program for learning purposes as well. However, the instructor has to make sure that the program has enough features or functionality to apply for educational settings.

2.5.2 Mobile vs. ubiquitous technologies for learning

Ubiquitous learning is considered as a new way of learning in this digital world and one of the most ideal models for life-long learning, which equips learners with an excellent condition to achieve knowledge, enhance communication and studying at anytime, anywhere with any device (Ogata & Yano, 2004; Jones & Jo, 2004; Hu, Wang & Chen, 2017). While "mobile learning" is an increasing research field, it is a beneficial matter to combine adaptivity and personalization in mobile learning system, which allows students to access the environment that is not only accessible anytime and anywhere, but also providing students with the individual preferences and needs (Kinshuk, 2015). Moreover, Cheon *et al*. (2012) claimed that mobile learning can be an innovative mode of learning utilizing the unique capabilities of mobile devices within formal education with potential benefits related to cost reduce, ubiquitous

communications, study support. Although the content placed on the e-learning platform, comfortably accessible from any place at any time, seems to meet individual needs of the learners, easy access to learning content does not ensure desired outcomes of teaching and learning progress (Maria Zajac, 2009). In other words, how to use these learning resources needs continuous assistance not only technical but also pedagogical (Hubbard & Romeo, 2012; Stockwell, 2012; Fullan 2013).

There are a variety of research in terms of potential benefits from ubiquitous learning platform. For example, Chang *et al*. (2009) held that ubiquitous game-based learning system provides users with a compelling, convenient, and engaging learning environment. Participants who take part in this system improve not only their learning motivation but also their learning proficiency. Similarly, ubiquitous learning is likely to lead to peer-to-peer collaborative learning as well (Yang, 2006); more engagement in studying English vocabulary (Huang *et al*., 2012). Ogata *et al*. (2014) conducted an experimental research project from October 2009 to March 2013 called "ubiquitous learning log" (ULL) in Japan with the help of a system called SCROLL (System for Capturing and Reusing Of Learning Log). The SCROLL system helps learners capture their daily learning activities visually with photos, audios, video, etc. and afterwards reuse them for learning and educational purposes. For instance, users can receive customized quizzes and answers to their inquiries through this system. In this case, ubiquitous learning leads students to self-reflected and self-directed learning, which is one of the major goals in the learning process.

In a similar vein, ubiquitous leaning is likely to link with the efficient use of digital learning resources (Camilleri & Camilleri, 2017). In this sense, instructors are the pioneer one required to be familiar with digital learning resources (Greenhow and Robelia 2009). Instructors are also

expected to have responsibilities to provide guidance, strategic support and assistance to learners with various requirements for their own learning purposes (Mills 2010; Fullan 2013; Kinshuk, 2015).

A study in the ethical perspectives of mobile, ubiquitous and immersive technology enhanced learning by Lally *et al*. (2012) proposed that advances in mobile usage and networked technologies have a strong impact on the ways young people communicate, socialise, interact and study in both formal and informal environments. Along with this ubiquitous presence of technologies, participants are immersed by an overloading quantity of information, including language. Much of this information is being visually displayed in new, complicated, and persuasive ways, from which learners who take part in this learning environment are likely to benefit (Kessler, 2013). Due to the ubiquitous dimension, it is likely to make learners consumers, therefore, when participating in this environment, learners, researchers, instructors have to respect the privacy and ethical issues to make ubiquitous learning secure (Lally *et al*., 2012).

2.5.3 Technology and agency in language learning

In Dörnyei & Kubanyiova's work (2014), they explained why 'agency' is important by taking Oyserman *et al*.'s (2002) recommendation to personalise that emerging self-images on step further, another reason for further reflection on the term *construct* originates from a specific view of education which places *learner agency* – that is, learners' proactive investment in the learning process – at the centre of the educational process. They summarise that agency implies that learners are allowed to exercise their capacity to act in ways that are suitable with their own lived experience and identities. Moreover, learner agency refers to some extend of the ability that an individual is able to take control, as well as to understand and take the initiative upon

certain affordances (Flowerdew & Miller, 2008; Hall, 2008; Gao, 2010; Mercer, 2011), usually occurring in a community of practice (Liu & Chao, 2018).

Based on the framework of self-determination theory (e.g., Deci & Ryan, 1985), Reeve (2012) claims that agency is related to engagement, along with behavioural, emotional, and cognitive aspects (see also Philp & Duchesne, 2016). Reeve referred agentive engagement as the learner's "proactive, intentional and constructive contribution into the flow of the learning activity" (p. 151). For example, the author identified agency in the learner's own learning outcome, involvement, and suggestions - "enriching the learning activity" rather than "passively receiving" (p. 153). In a similar vein, Svalberg (2009) described the agency of the learner as "interactive and initiating" (socially engaged); and/or as the one who "pays focused attention and constructs their own knowledge" (cognitively engaged); and /or one who has "a positive, purposeful, willing and autonomous disposition towards the object (affectively engaged)" (p. 247).

Moreover, Lamy (2007) suggests technology "encourages learners to exercise agency and enact identities" (p. 263). Technology-mediated communication environments help learners develop a positive L2 identity and learner's agency in the learning process by offering opportunities for learners to take advantages of a variety of communication platforms and tools (Lamy, 2006; Kenning, 2010; Lai & Li, 2011). For example, Lam's (2000, 2004) findings showed that English learners who label themselves with the identity of failure in the instructional setting but not in an online community develop a new agency as an engaging and confident English learner. Therefore, through technology-mediated learning environments, a positive L2 identity and learner's agency fosters students to devote more time and effort into language learning (Lai and Li, 2011). Meskill (2013) sees learners as being inherently agentive plays an "active, observable and reportable" role in the educational process. The author also mentioned that it is the agentive

learners that take control of the technological means and decide what kind of roles of these means can and do play in the individual growth. Similarly, Van Lier (2004) considered learners as agents who first understand affordances in the potential learning environment and then immerse themselves in their preferable activities.

In the classroom setting, students and teachers may need to cooperate collaboratively in order to achieve the most desirable learning outcomes. That is to say, both learner and teacher agency are required in learning process because learning is closely related to agency (Van Lier, 2010; Liu & Chao, 2018). In other words, an agency-rich educational setting can become a supporting environment for both instructors and learners.

According to Mercer (2011), agency is a complex dynamic system constituted from various factors including learners' beliefs, motivation, self-regulation as well as the concepts of affordances in any specific language learning environment. Similarly, Van Lier (2010) suggested three main characteristics of agency consisting of learner' self-regulation, initiative and responsibility in the particular situated learning environment. In short, by understanding agency, it can be beneficial and practical for teachers in terms of pedagogy to help students to become the most possible effective language learners.

2.6 Online social interaction tools

Social networking through Information and Communication Technologies (ICT) is becoming an indispensable part of the way in which people interact in their everyday lives, with more people connected to one another through what have come to be known as social networking or social media technologies than ever before. Even before the Internet became the international

phenomenon that it has now become, theoretical and methodological frameworks of social networking have been the focus of discussion for several decades from a social and behavioural science perspective (e.g., Wasserman & Faust, 1994). These studies have enabled researchers to examine the complex relationships that exist between the different participants within these social interactions, the changing roles played by the actors, the dynamics of the interactions, and factors that contribute to successes and failures in achieving various outcomes. In this study, social networking will refer to a more specific usage of the term, that is, the linking of people mediated through technology in a way that enables them to communicate with others around, exchanging ideas, images, text, audio, and video, and any combination of these, with a particular focus on how this is applicable to language teaching and learning.

Educators, which of course include language teachers, have typically been quick to explore the potential uses of technology for teaching, and over the years trends in technology have also been reflected in educational contexts as well. In one sense, it is not surprising that the potential for social networking has attracted the interest of second language educators. From the spread of computer-mediated communication (CMC) into personal and commercial use in the 1990s, teachers have been interested in seeing the ways in which communication can be enhanced between learners, between learners and the teacher, and between learners and speakers of the target language in the wider community. The social media that are available today—including Facebook, Twitter, Pinterest, Snapchat, LinkedIn, and a range of messaging and audio-visual communication tools—are a natural evolution of CMC that build upon but extend beyond it. Communication through social networking tools means that it has become more accessible, with most people carrying mobile devices that make it possible to send multimodal messages—which include textual, visual, and auditory elements—with minimal effort. Features that enable users to forward messages from other sources that they may encounter while browsing through

the feeds on social media tools, or alternatively to create their own with the cameras and video and audio recording functions are now an expected part of most modern mobile devices. This ubiquity of multiple modes of communication is in part one of the reasons why they are attractive to educators. Information that can guide learners to connect in-class and out-of-class learning has gained wider recognition over the years (see Bevan, Bell, Stevens, & Razfar, 2013; Sharples & Pea, 2014). It follows that providing language learning opportunities for learners outside of the class where they can interact with teachers, other learners, and authentic audiences makes social networking an extremely attractive prospect for language teachers as well.

Other problems have been associated with the inherently personal nature of social networking, which is typically used as a means of maintaining social relationships, and there has been discussion of the ethical concerns of requiring learners to make their private accounts available to teachers (Blyth, 2015). There have also been various cultural differences as well (Stockwell & Hubbard, 2013), which can result in different views of the same technology in comparable tasks or activities. This brief overview illustrates some of the complexities involved with using social networking in language teaching and learning, but that there is still a strong potential for using it as a tool to support learning both in and outside of class.

Social networking has taken on various different formats over the years, ranging from text-based tools during the early days of (and before) the Internet such as chat, email, and bulletin board systems, through to complex multimodal, multiparticipant tools that form the basis of what most people would perceive it to be today. Social networking is dependent upon a variety of tools which Rennie and Morrison (2013) define as including, among others, blogs, games

and simulations, instant messaging, interactive whiteboards, mashups (a fusion of different elements), online forums, photo sharing, podcasts, social bookmarking, virtual worlds, wikis, and video sharing sites.

It may also simply be because these social tools spread ubiquitously, which are likely to influence several aspects of our lives outside of the classroom setting (Kessler, 2013). Each of these types of social networking tools allows for different types of interactions between the participants with different audiences using different modes of communication depending on their individual purposes. Some tools, for example, may be used primarily for text-based communication on a one-to-one basis such as messaging apps like WhatsApp, Messenger, or LINE. While these tools may also allow for other modes of communication such as audio or video, or they may allow multiple participants to interact through the creation of groups. Other tools such as Facebook are in some sense an extension of blogs that preceded them but allow freedom to both disseminate and censor the content which users choose to make available to others. As a result, the shape of what social networking tools themselves are may be elusive in some ways, but the key point is that they allow for interaction such that ideas can be shared, refined, agreed to, disagreed with, and evolved among their users.

2.6.1 Historical development of social networking

The primary thrust of this section is to provide a historical perspective on the development of social technologies, as this can provide insights into not only the current uses of social networking technologies for learning and non-learning purposes, but also the nature and outcomes of research that can form the basis of inquiry into the tools that are being used. The past several decades have seen a shift in computer-mediated communication (CMC) from

predominantly textual communication through to multimedia that incorporates images, sound, and video which have also been reflected in the broader social communication tools, initially predominantly as blogs and wikis, and later into the range of tools that users choose to communicate with people near or far. This has resulted in a change in electronic communication from being largely one-to-one to many-to-many (see Levy & Stockwell, 2006) that bring about new dynamics in the relationships between people, sharing some characteristics with face-to-face communication, but at the same time raising new issues given the broader audience with regards to real and imagined communities (Kanno & Norton, 2003; Norton & Kamal, 2003). Moreover, mobile technologies now keep learners constantly connected with one another in social non-learning relationships, and this is being capitalised upon in learning contexts as well, even though there are often mismatches between teacher and learner expectations for the type of communication that is expected to take place. Moreover, CMC research has given a solid foundation on which to base research and practice for social networking in language education (e.g., Blake, 2008; Henry, Carroll, Cunliffe & Kop, 2018), but also that there are new issues that are arising that need to be considered on their own individual merits (see Baird & Fisher, 2016).

By its very nature, social networking entails interaction between participants involved in the communication context, and there has been an extensive amount of work that has been carried out over the past several years to investigate various elements of this interaction (e.g., Amichai-Hamburger, 2005). Discussions on online social networking for language learning have also increased in recent years (e.g., Lamy & Zourou, 2013; Meskill, 2013), and this has started to prompt research into the various features of social networking and its applicability to language teaching and learning. One of these features that has attracted attention has been that of online identity, and the images that social networking participants can portray of themselves. Potter

(2012) discusses "storying" where online users construct their own identity that may partially reflect their actual selves, but may also include elements of their ideal image. For example, as language learners, users may choose to portray themselves as competent users of a target language, but at the same time, they may reveal their language learner status (Tudini, 2010), and this has the potential to change the social dynamics of the interaction between the participants in the interactions. In addition, several key elements associated with social networking, including learner agency (Knight, Barbera & Appel, 2017), culture (Lomicka & Lord, 2016; Chen 2017), and socialisation, envisioned future identity, learner investment in social networking, and real and imagined community (see Reinhardt & Chen, 2013). Each of these issues will be considered in terms of how learners engage in social interaction, and the ways that this can have an impact on language teaching and learning.

2.6.2 Synchronicity and asynchronicity in social interaction

One of the first communication theories related to computer-mediated communication (CMC) that formally acknowledged the synchronous/asynchronous distinction between different types of communication media was media richness theory (Daft & Lengel, 1986). According to this theory, media richness includes four elements: (i) the possibility for providing instant feedback (synchronicity); (ii) the availability of social cues (i.e., verbal, non-verbal, and visual); (iii) the ability to customize personal messages; and (iv) the ability to convey ideas in a natural way. Besides the social interaction with synchronous/asynchronous communication tools, the anytime, anywhere characteristics of synchronous/asynchronous online tools create the environments for participants who would like to take advantage of this platform to take control of when, where, and how they learn (Meskill, 2013).

Chan (2011) examined the role of shyness and sociability in the relation of the characteristics of media synchronicity and asynchronicity for interpersonal communication. The results showed that there is a positive relationship between shyness and sociability and asynchronous media interaction as spontaneous communication can increase the workload on working memory and increase feelings of social anxiety. Another example from Darics (2014), the study found that instant messaging as a synchronous tool enables interactions in a virtual team, and thus creating the sense of cooperation for team members who are not geographically close. Also, virtual teams' perceptions can be improved regarding the effectiveness of asynchronous e-collaboration in terms of task cooperation processes, team functions and problem solving (Deluca & Valacich, 2006). Moreover, Noble and Green (2009) reported that although texting is a form of asynchronous communication, the use of texting through mobile phones in the chaotic situations can create the possibility of synchronous activity and increases the "security of connecting co-located" community members. In particular, the potential of synchronous text communication as a new mode of social interaction and collaboration is likely to facilitate the circulation of time-sensitive environments where sensory information is accommodated and stimulate the quality of the friendships as well as receive social support in social interaction (Valkenburg & Peter, 2011).

The use of asynchronous discussion environments as a learning medium for academic purposes has become a potential powerful learning form (Lim & Cheah, 2003). According to Gibson (2009), it is necessary to find out how synchronous and asynchronous technologies are used to enhance interaction in order to entirely recognize the ways in which instructors may design pedagogic structures that can take advantage of the affordances of such environments. The author's findings enable us to see the relationship between participation, pedagogic plans and technological structures. Gibson proposed that asynchronous online environments can be useful for learners to

practice reading and writing; for tutors' roles in the contribution to enhance students' learning experiences (Berge & Collins, 2000; Lim & Cheah, 2003).

Gomes & Pimentel (2011) reported that from applying the synchronous and asynchronous sharing of collaborative annotations on ubi-videos with a human-readable codification, the results through the observation of the frequency use support and utility measures showed that the users can interact in a variety of groups or subgroups, or even in situations where not all users in a group actively engage in social interactions. Another exploratory study from Brierton *et al*. (2016) found that learners can develop higher order thinking skills via synchronous and asynchronous communication mode. In this investigation, overall synchronous discussion was acknowledged to be at the knowledge level and overall asynchronous discussion was at the comprehension level.

In the comparison of the effects of synchronous and asynchronous communication, AbuSeileek & Qatawneh (2013) proposed that students who used the asynchronous mode constructed dramatically more discourse expressions in terms of question types and strategies. The findings also proved that the asynchronous mode stimulated participants to ask question types that require long and detailed responses. Meanwhile, the synchronous mode enables learners to ask question types and strategies that require short and explicit responses. On that account, the results can be applied for more informal teaching designs in EFL contexts due to the possibility to raise learners' awareness and approach to their own learning process. In a similar vein, Sotillo's (2000) study focuses on discourse functions and syntactic complexity in English-as-a-second-language (ESL) learner output via asynchronous and synchronous communication. The author reported that there were similarities between the quantity and types of conversational expressions in synchronous discussions and that in face-to-face conversations which are likely to be important for second language acquisition. However, discourse functions

were more restricted in asynchronous mode. Regarding syntactic complexity, the postponed feature of asynchronous interactions provides learners more time and opportunities to make syntactically complex expressions. Sotillo also suggested that with the different features of asynchronous and synchronous mode, we can apply for different pedagogical purposes. For example, fostering interaction among learners, creating collaborative text structure, and forming communities of learners.

In the current study, LINE, which is a popular text messaging app in Japan, was used for both synchronous and asynchronous communication for social interaction and for pedagogical purposes as well.

2.6.3 Use of verbal and non-verbal communication (multimodality)

Multimodality is the use of two or more forms of communication from the two main modalities (i.e., verbal and non-verbal mode). When conveying a message, interlocutors usually employ a combination of communication modes, which is called multimodality. Multimodality is found to increase the efficiency in augmentative and alternative communication (Loncke *et al*., 2006).

Non-verbal communication involving visual, audio, gesture is important to understand and integrate into the social world (Tanaka *et al*., 2015). There are many studies on the beneficial impact of non-verbal communication for the deafblind who depend on simultaneous use of vocal-auditive and visuo-spatial resources to interact and produce interaction (i.e., Edwards, 2012; Bartnikowska, 2017; Iwasaki *et al*., 2018). In addition, hearing people use non-verbal communication to draw attention from the audience; emphasize the meaning of their talk and make their speech easier to understand (Loncke *et al*., 2006).

From a multimodal perspective, Ranker (2017) defined "a signifier as a single entity that signifies meaning, such as a word, image, sound, gesture, or object" (p. 197). The author suggested that the signifiers from student-created videos play a crucial role in the pedagogical responses, which helps teachers make decisions about what exists and what is absent in the videos, then making suggestions for revisions based on their observation. Therefore, the study contributes a novel approach for educators to understand and recognize the complexity of students' multimodal modes. In a similar vein, Burn (2003) reported that it is necessary to understand the signifying work that students display with their "bodies, voices, and performance" by composing or developing a vocabulary system to recognize what students are pursuing in the multimodality environment.

With the development in computer-based technologies, participants in this environment need to apply multiliteracy skills and "the combination of the word and the image in the creation of multimodal texts" (Levy, 2009, p. 773) to perform complex activities. Nowadays, learners who use computer mediated communication tools need to be familiar with multimodal technologies, such as audio, video and text-chat in order to make full use of these modes' functions for language learning contexts. According to Yim and Warschauer (2016), the "effective integration of technology [for language learning] depends on the affordances of the particular technology and the ways its strength and challenges can be coordinated as a pedagogical tool" (p. 594). Originated from this perspective, Tan, O'Halloran & Wignell (2016) acquire a multimodal social semiotic approach including the combination of language study and verbal and non-verbal resources to examine the affordances and challenges related to the multimodal tools. The result showed that multimodality technologies offer more opportunities for language learning in a non-threatening environment, particularly for geographically dispersed learners

(Darics, 2014).

In the relation of technologies and multimodalities, Ellis (2018) claimed that "technology affords multi-modal (i.e., aural, written and visual opportunities for presenting complex workplans and for performing them synchronously and/or asynchronously." In other words, technology allows learners to have different modalities to do the complex tasks. While the multimodal approach gives learners access to a comprehensive theoretical framework for the use of digital platforms for language learning (Vigliocco, Perniss & Vinson, 2014), one main challenge is that learners may alack the necessary technical skills to exploit the multi-modal resources made available to them as well as the complexity of the interactions in these multimodalities (Tan, O'Halloran & Wignell, 2016).

Lai & Li (2011) had a similar exploration on online tasks that have been examined consist of text-based and multimodal computer-mediated communication (CMC) tasks. They concluded that synchronous (e.g., online chatting) and asynchronous (e.g., email, blogs, and wikis) are both used for forms of communication and language learning purposes. Furthermore, multimodal CMC including audio, video, and text which are ubiquitous to students, are likely to enhance language production during task performance (Lai & Li, 2011; Ellis 2018). For example, language proficiency of beginners increases considerably with the support of text chat to audioconferencing (Vetter & Chanier, 2006); learners' language production was longer but in more constrained conversations in audio-plus-video context than in an audio-alone context (O'Malley, Anderson, & Bruce, 1996). Moreover, learners seem to make more conversations when they can see each other's image during online chatting and more statements using target dialogues in voice chat without reference to the availability of images (Yamada, 2009).

In the current study, the instructor would like to see the ways that learners use multimodalities in online interaction for communication and for language learning purposes.

2.6.4 Participatory patterns in social interaction

Swain (2000) exploring the features of social interaction as collaborative dialogue, claims that "in second language learning, it is dialogue that constructs linguistic knowledge" (p. 97). According to Swain, there are two significant elements of interaction are *input* and *output*. Comprehensibility of input in a conversation with an expert depends on negotiation of meaning which also leads to successful learning outcomes for the learners. Output also plays an integral part in successful learning process, as "output may stimulate learners to move from the semantic, open-ended, strategic processing needed for accurate production" (p. 99). Varli (2013) further explained that language learning co-occurs in such a cognitive and social activity when novice speakers communicate, they are engaged in problem solving and knowledge building processes.

According to De Jaegher & Paolo (2007), social interaction is important, hence, we need to clarify participatory patterns including establishing an autonomous discipline and cognitive engagement as the activity of sense-making in social interaction to make our conversations a success. Following a similar theory of social cognition as De Jaegher & Paolo (2007), Fuchs & De Jaegher (2009) proposed enactive intersubjectivity concept in which participants interrelated in terms of interaction and experience. Based on the concept, social understanding or social interaction is perceived as the interactive and coordinative patterns of the interlocutors participated in the interaction process. In other words, mutual incorporation plays a crucial part in any social interaction.

Not only learners apply their own patterns in social interaction for language learning, but teachers also apply their teaching patterns in social interaction for teaching strategies as well. One of the best teaching patterns is Presentation, Practice, Production (PPP) according to Byrne (1976) and this teaching pattern were revised in detail in Anderson (2016). PPP pattern has been rejected in the technological era because its teacher-centred feature may cause teachers to mistreat the needs of individual learners (Anderson, 2016). However, a recent study from Shi & Stickler (2018) reported that PPP is a greatly structured teaching strategy, which is the most suitable for low language level of learners who do not possess enough vocabulary to express what they would like to say, especially in online learning environments that require a plenty of social interaction.

In terms of collaborative participatory patterns, Watanabe and Swain (2007) found that when the learners participated in collaborative patterns of interaction, they were likely to reach more desirable learning outcomes regardless of their partner's proficiency level. Proficiency difference in pairs does not have much effect on the essence of peer support and L2 learning. However, it is the proficiency difference that may establish a various pattern of interaction. In other word, even if learners are paired with a higher or lower proficiency partner than they are, they are still able to achieve their learning target if they engage actively in the collaborative patterns of interaction. In a similar fashion, Yang and Wu (2011) explored how learners' writing text revisions are improved by online interaction patterns. The results presented major differences in students' interaction patterns and their final writing versions. These authors advised that teachers should encourage as well as aid and provide guidance to low-participating learners to involve more in interactions with their peers by indicating the advantages of peers' text revisions in the final drafts.

However, the habits of using social media can affect the habit of participatory patterns in social interaction for learning (Larose, Kim & Peng, 2011). Also, social interaction production was highly related to habitual behaviours (Verplanken & Orbell, 2003). In other words, if students prefer to use a certain app engagingly for social interaction, which may affect their study experience negatively or positively through that app (Wood, Quinn & Kashy, 2002).

2.6.5 Identity in social interaction

Norton (2000) uses the term identity to denote how a person understands his or her relationships to the world, how that relationships is constructed across time and space, and how the person understands possibilities for the future.

Indeed, identity is viewed as comprised of the ever-changing stories we tell about ourselves in the world (Bruner, 2001). In another word, it is also a commitment to a certain set of presumption about oneself, one's relation to others, one's view of the world and one's place in it.

Ushioda (2011) claims that, for anyone engaged in learning a language, being a 'language learner' is likely to be just one aspect of their social identity or sense of self. She also argues that where L2 identity is related in the context, it is necessary to consider second language learners as real people who are necessarily located in particular cultural and historical contexts, and whose motivation and identities shape and are shaped by these contexts. Moreover, Block (2007, p. 864) reported that identity 'has become the approach of choice among those who seek to explore links between identity and L2 learning'. That is to say, teachers must consider learners' identity as one of the major factors in the educational context in order to make best pedagogical practice. As a consequence, if learners are successful to achieve more powerful identities, their language acquisition may be greatly developed (Norton & Toohey, 2011).

Given the assumption in Meskill (2013) that "minds are socially, culturally and linguistically shaped," we can see learners from various backgrounds coming together online for the purpose of learning with their own "interpretative toolkits" and as a result, they form online learning communities with a range of identities. Following post-structural conceptions of identities, Norton and Toohey (2011) conceptualized language learner identifies as flexible, context-dependent, and context-producing, especially in social interactions and community practices which are suitable with their identities. Furthermore, according to Vygotsky's (1978) sociocultural theories, Lantolf (2000, p. 8) discussed that students achieve "increasing control over the mediational means made available by their culture, including language for social interaction and cognition purposes." While some identity aspects may limit and restrict opportunities for learners to listen, speak, read, or write, other identity perspectives create a novel set of possibilities for social interaction and learner agency (Norton & Toohey, 2011).

Within the environment that Global/ World English is considered as an international language (Dörnyei *et al*., 2006), which makes most people have pressure to develop a *bicultural identity*, in which part of their rooted in their local culture while another part is associated with a global identity that links them to the international mainstream (Arnett, 2002). Also, Smith, Thomas, and McGarty (2015) suggested that people's new shared social identities are created by expressing their beliefs, opinions and ideas about the way the world is and the way they believe the world should be. They proposed that norms and identities should be integrated through communicating via social interactions. With the similar idea, Stapleton (2015) find that different types of social interactions fostered different types of identity development when they discuss the same favourite topics about their interests. Moreover, identities materialize from individuals' subjective understanding of interactions following a cultural norm on social

structures. Although most identity meanings are quite fixed in society, they are likely to renegotiate and sometimes change significantly. Therefore, understanding identity in social interactions may help interlocutors keep balance in their social behaviours with others (Schröder, Hoey, & Rogers, 2016) as well as succeed in their target conversations (Barnett, 2017).

2.6.6 Social networking and language learning

It goes without saying that the social dimension of social networking is the area that has attracted the most interest of researchers in the field, although of course the developments in the technologies (Newman, Chang, Walters, & Wills, 2016) and the wider reaching impact of social networking on society (Curran, Fenton, & Freedman, 2016) and on individuals (Huang, 2017) have also been topics of important discussion. From an educational perspective, social perspectives of learning have long been an important part of research in the field, as is reflected in the prevalence of papers and books that are based on social theories of learning, such as socioculturalism (e.g., Lantolf & Thorne, 2006), language socialisation (e.g., Foley, 1997), and even emotion (Oxford, 2017). Even these three perspectives provided here give some insight into the complexity of this social dimension, considering social interaction as the primary mediator for understanding concepts and language, and also as the origin and outlet of our emotions.

The potential of the social dimension of learning to contribute to various aspects of the language learning process has gained greater recognition over the past several years. The social elements of online interaction have been argued to enable learners to develop aspects of their future identity goals that may be linked to motivation (Ushioda, 2011). Through visualising possible

future selves as users of the target language, learners may feel more inclined to engage in interaction with other users of the language, resulting in a higher degree of intrinsic motivation (cf., Deci & Ryan, 2000). A related example is the social element of learner autonomy. Murray (2014) argues that the development of learner autonomy is not possible unless it takes place within a social context, and Lewis (2014) suggests that autonomy is more than the building of individual skills, rather encompassing a range of competencies that are supported by and, to a certain degree, facilitated by the group or groups to which they belong. These perspectives combine to show that the social dimension of social networking may contribute to sustaining learners' engagement in not only interaction in the target language, but also to lead them to spending more time on learning the language.

Lomicka and Lord (2016) examine social networking from technological, psycholinguistic, sociocultural and ecological approaches, and provide quite convincing evidence from these various perspectives that social networking can support learning not only directly (i.e., exposure to language), but also indirectly in terms of providing learners with support and social relationships that may enable more interaction and/or interest in learning. Empirically, there is also an increasing number of studies that have started to explore the use of social networking in language learning contexts (e.g., Álvarez Valencia, 2016). Results thus far have been rather mixed, where for the most part reactions from learners tend to show positive attitudes but limited interaction (Tran, 2016), who suggested that learners may be prompted to engage in activities more actively when they see postings from other students regarding their scores in online activities, but are unlikely to contribute to online discussion, particularly in part of a group.

2.7 Summary

As is often the case when new technologies emerge, there is a tendency to focus on the technology itself, sometimes at the expense of investigating how this technology may be applied effectively to educational contexts (Levy & Stockwell, 2006). Taking a balanced view of technology for language learning means not viewing the technology overly positively or negatively and being aware of both the strengths and the weaknesses that the technology may bring with it when integrated into the educational context (Stockwell, 2018). Social networking in education is not exception to this, and as Rennie and Morrison (2013) argue, ignoring social and technological trends is just as dangerous as following the latest trends simply because they are new, but rather considering how and why the technologies may be used to achieve particular pedagogical goals in an imaginative way may give rise to an enhanced educational environment.

At first glance, teachers providing learners with ongoing contact through social interaction seems like an idea situation where the learners can feel the presence of the teacher outside of the class as well (Lai, 2015), but there are studies that show that the time and effort required to replying to multiple messages or posts from learners can be an enormous burden on the teacher (Fouz-González, 2017; Tran, forthcoming). Similarly, learners themselves may find it to be an extra pressure to participate in certain types of social interaction, particularly if these may differ from their cultural norms in the ways in which they typically interact with others (see Liu, 2013). In this way, finding the balance of not only pedagogical goals, but also the time constraints and cultural practices of both the teacher and learners remain the primary challenges of educators with regards to social interaction in educational settings. Exploring how this may be achieved is the overarching objective of this study. It is hoped that teachers can apply the various

problems described here to their own individual settings to decide on what the balance should be, and to consider the options of how to go about overcoming them

Chapter 3. Theoretical framework

3.1 Introduction

3.2 Theories for motivation and autonomy

3.2.1 Self-determination theory

According to Dörnyei and Ushioda (2011), there are two typical types of motivation, namely *intrinsic motivation* (IM) and *extrinsic motivation (EM).* The first type of motivation (IM) refers to someone's performance for their own pleasure and satisfaction. For example, the joyfulness of doing a certain task or fulfilling one's desire. The second type of motivation (EM) refers to someone's performance for another different end. For instance, learners study hard to receive good scores or to graduate or not to receive complaints from teachers. The authors also suggested a third type of motivation, *amotivation* (AM), which involves the deficiency of intrinsic or extrinsic motivation.

There is one comprehensive framework of intrinsic and extrinsic motivation from Vallerand (1997; Vallerand & Ratelle, 2002) with the combination of multidimensional aspects from the cross-disciplinary literature. In general, all three types of motivation (IM, EM, AM) are described in the social orders as follow:

- *the global level* (referring as a common adaptation to interact with the educational settings in an intrinsic, extrinsic or amotivated mood);
- *the contextual level* (referring as the involvement in a specific environment of human activities such as education, entertainments, individual connections);
- *the situational level* (referring as the involvements in particular activities at a certain period of time).

The framework mentions three sub-categories of intrinsic motivation:

- to learn (actively participate in an action for the pleasure and fulfillment in order to perceive something novel, figuring out one's interest and discovering the surroundings);
- towards achievement (actively participate in an action for the satisfaction to be a better person, overcoming challenges and achieving or constructing something);
- to experience stimulation (actively participate in an action to experience a widespread reaction of interest and excitement.).

According to *self-determination theory* (SDT) from Dörnyei & Ushioda (2011), extrinsic motivation is a continuous effort depending not only on different levels of external control or internal regulation (self-determination), but also on how these extrinsic goals are defined within the individual. In fact, extrinsic goals are completely incorporated within the individual's self-conception. For example, their extrinsic motivation involving their own appreciation of the ability of speaking a certain language may arise at the same time as intrinsic motivation involving the joy of learning the language).

There are four types of extrinsic motivation as follow:

1. *External regulation* describing as the least self-determined degree of extrinsic motivation from outer sources such as recompense or punishments (e.g., teacher's compliment or parents' satisfaction).
2. *Introjected regulation* refers to externally compulsory disciplines that learners follows as norms in order to prevent wrongdoings (e.g., disciplines against cheating).
3. *Identified regulation* happens when the student engagingly participates in an activity because he or she can foresee its benefits of accomplishing (e.g., learning a foreign language which is essential to strive for one's new hobbies or pastimes).
4. *Integrated regulation* is the most advanced form of extrinsic motivation, which the

student chooses to integrate their behaviour with the individual's other values, needs and identity (e.g., mastering English is a part of global citizens in the environment that the individual exists).

SDT's main concept concentrates on how motivation for externally determined objectives and manners may be socialised and by degrees internalised. There have been several studies showing that people will act a certain behaviour in a more self-determined way if their adopted society provides necessary supports for human needs as follow:

- *autonomy* (i.e., having a sense of oneself as a fundamental for the action),
- *competence* (i.e., feeling of efficiency and achieving the goals),
- *relatedness* (i.e., feeling of belonging to a certain community and having connection to other individuals).

In the current study, the researcher investigates students' motivation in terms of intrinsic, extrinsic or amotivated based on the global level, the contextual level and situational level. Moreover, the researcher figures out which sub-categories of intrinsic and extrinsic motivation that students apply for their learning goals and whether their motivation follows the SDT's main concept or not. Note that the researcher in this current study is also the instructor.

3.2.2 Goal theory

According to Dörnyei and Ushioda (2011), the theoretical definition of 'goal' has greatly substituted previous definitions of 'needs' or 'drives' as the foundation to provide the momentum for and regulation of motivated action. Researchers in the field have paid attention on three main areas:

- goal-setting,
- goal-orientation,

- goal content and multiplicity

Goal-setting theory

Locke and Latham's (1990) *goal-setting theory* attempt to interpret distinctions in individuals' performance regarding of discrepancy in goal dimensions. Goal-setting theory is consistent with expectancy-value theories in terms of goal commitment is perceived as a means to foster people's beliefs that the goal is possible to accomplish (cf. expectancy) and the goal is necessary to complete (cf. task value) (Dörnyei & Ushioda, 2011). In other words, if an individual is committed to the goal, which is achievable and non-conflicting with other goals, there is a potential, sequential interrelation between goal difficulty and task performance. Goals involve future desired outcomes; therefore, the setting of goals is the most fundamental process in order to create individual's discrepancy (Locke & Latham, 2006).

In a nutshell, Locke (1996) summarises the characteristics of goals as follow:

1. The harder the goal, the greater the attainment.
2. The more defined or clear the goal, the more properly action is taken.
3. Goals with both specificity and difficulty contribute to the greatest achievement.
4. Commitment to goals is the most important when goals are high, hard and explicit (i.e., high goals lead to greater effort and/or consistence because the concentration and dedication that individuals put in to achieve the goals.).
5. High commitment to goals is accomplished when (a) the individual understands the importance of goals; and (b) the individual believes in the possibilities that goals can be achieved.

Goal-orientation theory

In contrast to goal-setting theory, which was relevant to motivation in the working environment, *goal-orientation theory* was established to interpret student's learning and performance in educational environment (Dörnyei & Ushioda, 2011). According to Ames (1992), the theory

sheds light on two counterpoint goal orientations that students can apply for their academic purposes:

- mastering orientation, referring to the achievement of 'mastery goals' (also known as 'task-involvement goals' or 'learning goals') with the main attention on understanding the content;
- performance orientation, referring to the achievement of 'performance goals' (or 'ego-involvement goals') with the main attention on presenting ability, acquiring good scores; passing the tests or surpassing other peers.

On that account, mastery and performance goals explain different principles and different motive in engagingly performing the task in order to reach the target. The crucial point of a mastery orientation is the belief that effort can lead to individual success as well as individual progress and development.

On the other hand, a performance orientation perceives learning purely as a means to attain a goal and receive recognition from others. In addition, Linnenbrink (2005) reported that relationships between learners' personal goal orientations and the pedagogical context (whether mastery or performance focused) should be taken into consideration so that leaners can understand this context and develop themselves.

Goal content and multiplicity

Dörnyei & Ushioda (2011) claimed that goal-setting theory and goal-orientation theory mainly relate to individual performance and achievement; however, learners' motivation may also be possibly created by goals that are not merely about academic demonstration, achievement or competence. Based on Ford's (1992) previous research on goal content, Wentzel (2000, 2007) has investigated students' cognitive dimensions of what they are attempting to accomplish (i.e., the content of their goals) in a particular classroom setting. For instance, students try their best

to study, build friendships, get along well with their peers, satisfy the teacher's requirements, avoid punishment or follow class's rules. Wentzel's research shed light on how the integrated attributes of various social and academic goals can have a great impact on students' academic achievements, especially the way in which non-academic aspects of competence such as social competence may highly contribute to the success of academic competence.

Wentzel's work has drawn several scholars' attention to the crucial role of social and emotional aspects in stimulating learning, which reflects the contemporary movement towards incorporating emotions into forms of motivation (Dörnyei & Ushioda, 2011). Furthermore, the central point on the social dimension of goal development represents the increasing significance of vivid and socially situated aspects on motivation in current theory, owing to the fact that goals are 'socially derived constructs that cannot be studied in isolation of the rules and conventions of culture and context' (Wentzel, 2009, p. 106). A variety of studies prove that with clear and specific expectations and opportunities for the pursuit of academic goals, along with emotional support from positive peer relationships that foster students' achievement of academic goals and other different academic accomplishments (Wentzel, 2007, p. 292).

In the current study, the author would like to investigate whether the students possess goal perspectives in terms of goal-setting, goal-orientation or goal content and multiplicity or not.

3.2.3 L2 Motivational Self System

There has been a growing disagreement with the concept of integrativeness/ integrative motivation which has been at the centre of L2 motivation research for nearly five decades (Dörnyei, 2001; Gardner, 2001; MacIntyre, 2002; MacIntyre *et al*., 2009).

Integrativeness refers to an internal interest in learning the second language in order to approach

to the preferred language community. In one sense, this indicates that the individuals are willing to learn and have respects for other cultural groups and lifestyles. In the other hand, this implies that the individuals would like to possess recognized identification with the community (and may refuse one's original community), but more popularly, the individual prefers to integrate into both community (Gardner, 2001). In other words, (Dörnyei, 2009, p. 22) summarised that Integrativeness is described as "the desire to learn an L2 of a valued community so that one can communicate with members of the community and sometimes even become like them."

Integrative motivation is complex and multidimensional concept, including three main factors: 'integrativeness', 'attitudes towards the learning situation' and 'motivation' (see Figure 3.1). In this concept, motivation is viewed as the combination of motivated behaviour, engagement, determination and affect (Gardner, 2001).

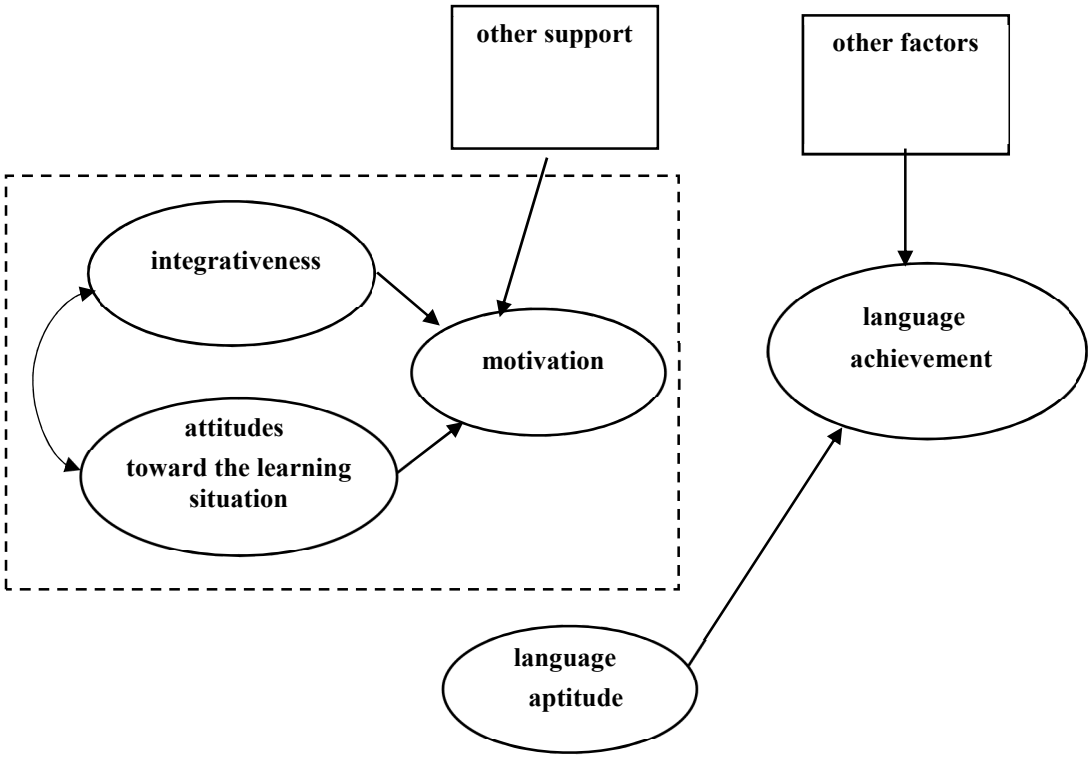


Figure 3.1. The integrative motive within Gardner's 'Socio-Educational Model of Second Language Acquisition' (Gardner, 2001: 4)

However, in Dörnyei 2005's review, he had a closer look at L2 motivational literature which presents various contradictory opinions about integrativeness/ integrative motivation, referring

sometimes to kind of 'love-hate' relationship among scholars out of Gardner's circle. Furthermore, it is said that the concept 'integrative' is ambiguous because it is difficult to define the target of the integration, and in several foreign language learning settings where students have no direct connection with its speakers, this concept does not carry much meaning. For example, teaching English and French in Hungary, China, Vietnam, Japan or other common 'foreign language learning' contexts, the 'integrative' concept does not imply any clear meaning.

Therefore, in 2006, Dörnyei *et al*. developed a schematic representation of the structural equation model in which integrativeness had a prominent place. However, Dörnyei and his associates also determine several other attitudinal/ motivational perspectives, such as *Instrumentality* (i.e., the practical benefit of learning the L2); *Direct contact with L2 speakers* (i.e., feelings and reactions towards directly interact with L2 speakers and traveling to their country); *Cultural interest* (i.e., the respects of cultural products related to the certain L2 and displayed by the public broadcasting; e.g., films, TV programs, magazines and pop music); *Vitality of L2 community* (i.e., recognizing the significance and prosperity of the particular L2 communities); *Milieu* (i.e., recognizing the importance of the specific foreign language in one's own educational environment as well as in peers' and parents' viewpoints); and finally *Linguistic self-confidence* (i.e., individual's own value when mastering an L2 can bring one confidence and anxiety-free belief).

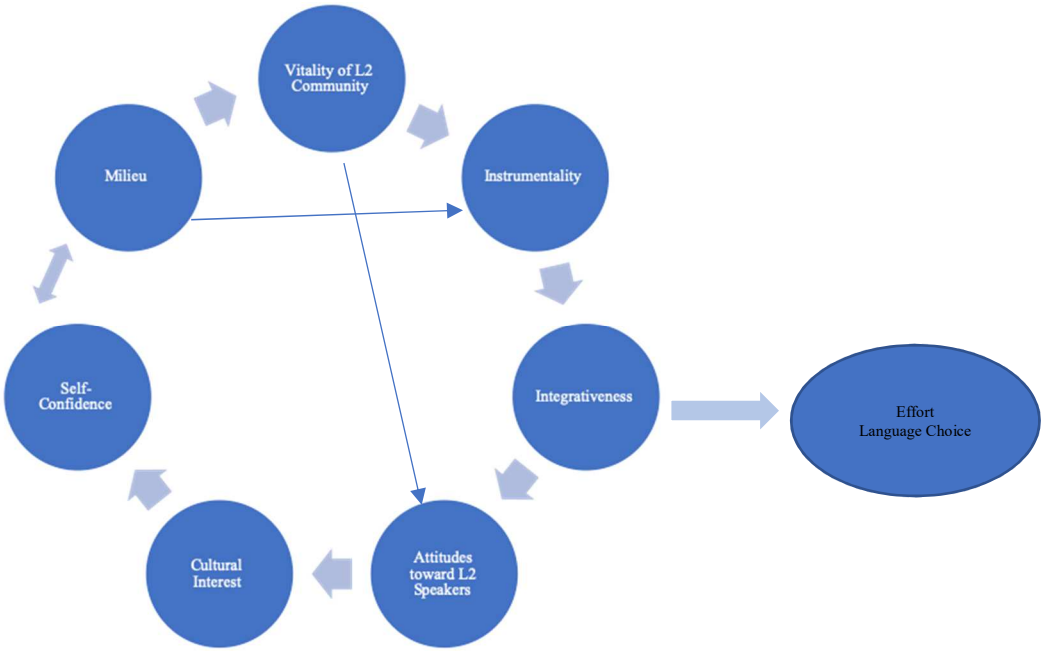


Figure 3.2. Schematic representation of the structural equation model in Dörnyei *et al*.'s (2006) study

As can be seen in Figure 3.2, the most crucial factor of the model is *Integrativeness,* which was considered to play a main part in L2 motivation, intervening the consequences of all the other attitudinal/ motivational perspectives such as *Language choice* and *Intended effort* to study the L2. The variables that are antecedent of *Integrativeness* were *Attitudes toward L2 speakers/community* and *Instrumentality,* which revealed that the fundamental factor in the motivation concept was determined by two different variables, namely individual's own attitudes towards the preferred L2 community members and the beneficial usage of the L2.

In Dörnyei's (2009) work, he viewed "integrativeness" from the self-perspective, the concept can be perceived as the L2-particular aspect of one's ideal self. Therefore, he proposed that the new model is the balance of motivational perspectives which combine "integrativeness/ integrative motivation" with *Ideal L2 Self* into the new theory. He also claimed that the new theory explained the two antecedent variables of integrativeness in Figure 3.2, "attitudes toward

members of the L2 community" and "instrumentality" very well. These are described in depth forthwith.

(1) Attitudes toward members of the L2 community: It is undeniable that that L2 speakers are the closet model that the learner would like to follow as an ideal L2-speaking self. This indicates that our ideal language self-image depends on our attitudes towards members of the L2 community. The more favourable opinions we have for these L2 speakers, the more fascinating our idealised L2 self is. Thus, the self-conception of integrativeness is well suited with the direct parallel of the new model with "attitudes toward members of the L2 community." In sum, the interrelation of variables in Figure 3.2 not only makes sense but also formalises the acknowledgement of integrativeness as the ideal L2 self.

(2) Instrumentality: In our own idealised image, we would like to succeed in our professional occupation, thus instrumental motivation factors involving career accomplishment are logically associated with the ideal L2 self. From this perspective, 'instrumentality/ instrumental motivation' were traditionally perceived as a correlation of these two dimensions: when our idealised image is connected with being successful in profession, instrumental motives are viewed with a promotion focus. For instance, learning English for the purpose of professional/ career development are compatible with the ideal self; on the other hand, instrumental motives are viewed with a prevention focus when students study in order not to fail an exam or not to dissatisfy one's parents, which refers to ought-to self.

From the review above, the current study follows L2 Motivational Self System (Dörnyei, 2005, 2009), which was made up of the three following constructive factors:

(1) *Ideal L2 Self*, referring to the L2-particular aspect of one's "ideal self." Particularly, if the person we would like to be able to speak an L2, the *"ideal L2 self"* is a positively engaging

motive to learn the L2 because of the determination to reduce the difference between our present and ideal selves.

(2) *Ought-to L2 Self,* representing the belief of possessing the attributes that one ought to have in order to meet expectations and to avoid negative outcomes that may occur.

(3) *L2 Learning Experience,* presenting contextual, "executive" motives associated with the situated learning context and experience (e.g., the teacher's influence, the curriculum effects, the relationships with peers, the experience of accomplishment).

Dörnyei (2009, p. 30) made comparison between his L2 Motivational Self System with other current motivation theories by Noels (2003) and Ushioda (2001). Noels perceived L2 motivation as the consisting of three reciprocal aspects: (1) intrinsic motives related to the language learning process, (2) extrinsic motives for language learning, and (3) integrative motives. These three elements are closely associated with the L2 Learning Experience, the Ought-to-L2 Self and the Ideal L2 Self, respectively. The other motivation theory is from Ushioda's. She proposed motivation theory in a more complex construct, which is correlative to both the model presented by Noels and the L2 Motivation Self System. Her motivation model consists of eight motivational perspectives, which can be classified into three extensive groups: (1) *actual learning process* (perceived as "Language-related enjoyment/liking," "Positive learning history," and "Personal satisfaction"); (2) *external pressures/incentives*; and (3) *integrative disposition* (perceived as "Personal goal," "Desired level of L2 competence," including language-intrinsic goals). In this sense, Ushioda's motivation theory is obviously parallel with the L2 Motivational Self System. Therefore, the current study follows the L2 Motivation Self System from Dörnyei in order to have a comprehensive guidance in understanding and analysing students' motivation.

3.2.4 Achievement theory (Harter, 1986)

Atkinson's achievement motivation theory (cf. Atkinson & Raynor, 1974) was the first comprehensive model of achievement motivation in the area for decades. There are two main elements in his model as follow:

1. *Need for achievement*: Individuals with a high expectation for achievement thrive for their own expertise (rather than for the extrinsic compliment it can bring). They are also the ones who pioneer to perform achievement activities, focus on their tasks with high intensity and persistently face with failure. This need plays a central role in an individual's characteristics and influences the person's manners and actions in every way of life, including education.

2. *Fear of failure*: This is the contrasting need for achievement; however, the main motive to perform well comes from avoiding a negative outcome rather than gaining a positive one

3.3 Theories for learning through technology

3.3.1 Technology Acceptance Model (TAM)

According to Davis and Davis *et al.*'s (1989) Technology Acceptance Model (TAM), which was made to understand user acceptance of technology. TAM is proposed to lay the foundation for determining factors affecting the use of computer system.

For the details of each variables which constitute TAM, please see Figure 3.3.

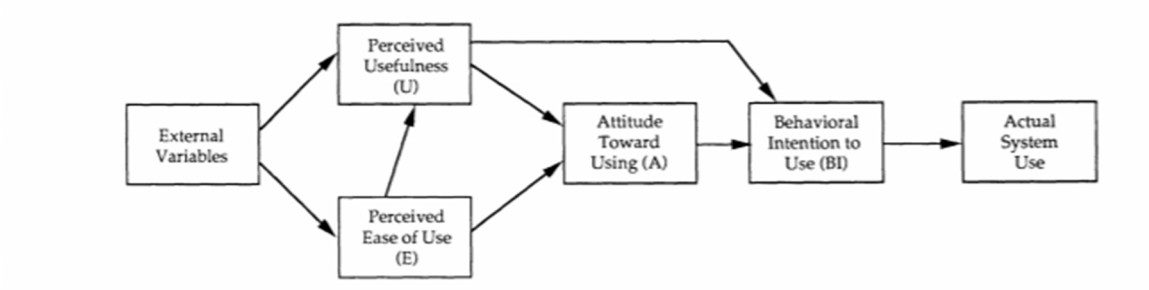


Figure 3.3. Technology Acceptance Model (TAM)

Perceived usefulness (U) refers to "the degree to which a person believes that using a particular system would enhance his or her job performance." Davis defined "usefulness" as "capable of being used advantageously." He also mentioned that a system acknowledged to be in high usefulness allows users to trust in the possibility of a beneficial use-performance relationship.

Perceived ease of use (EOU), on the other hands, is considered as "the degree to which a person believes that using a particular system would be free of effort." Based on the definition of "ease": "freedom from difficulty or great effort." The authors claimed that if users think that one system is easier to use than another system, users are more likely to accept to use the easier one.

Besides two main components perceived usefulness and perceived ease of use, other factors that shapes TAM are attitude towards using (A), behavioural intention to use (BI) and external variables.

Following TAM, all the variables are interrelated as following formula:

(1) BI = A + U

(2) A = U + EOU

(3) U = EOU + External Variables

(4) EOU = External Variables

3.3.2 Unified Theory of Acceptance and Use of Technology (UTAUT)

The unified theory of acceptance and use of technology (UTAUT) (Figure 3.4) is comprised of similarities and differences from eight different models (for the review and comparison of the eight models, see Venkatesh, Morris, & Davis, 1989). This comprehensive unified model aims to provide a useful framework to evaluate the possibility of how successful new technologies are applied and used as well as help us recognize the variables of user acceptance. From this understanding, we can actively design strategies to attract groups who are less likely to accept and use new technological systems.

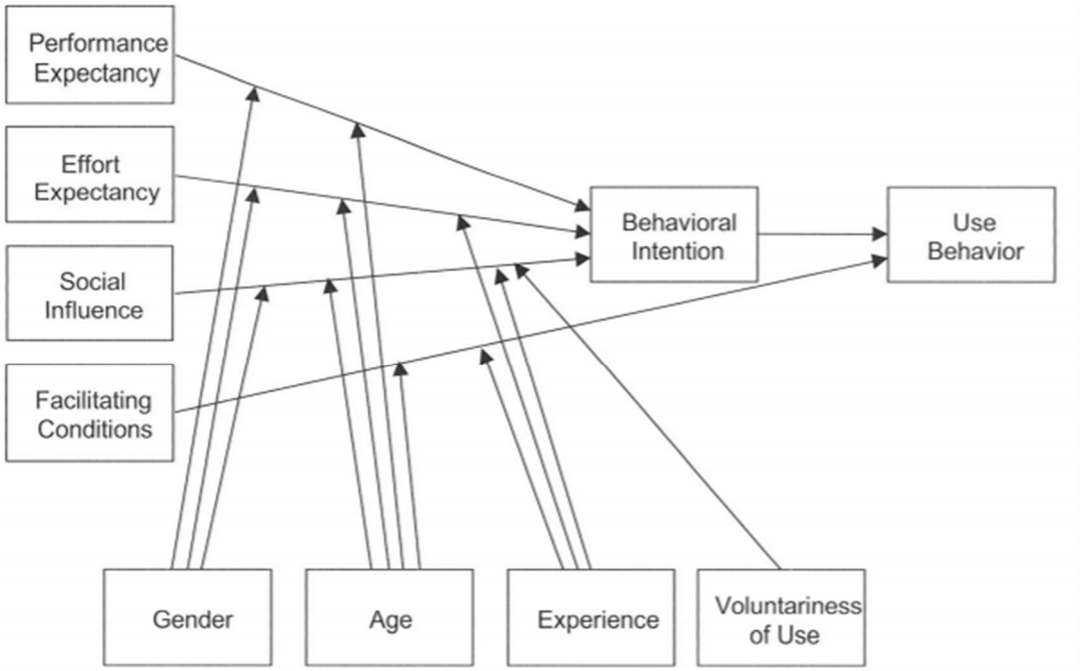


Figure 3.4. The Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh, Morris & Davis, 1989)

According to the model, four components which play a crucial part in directly understanding user acceptance and usage behaviour are performance expectancy, effort expectancy, social influence, and facilitating conditions. Unlike TAM (Davis *et al*., 1989), other variables, namely attitude toward using technology, self-efficacy and anxiety are conceptualized not to be direct determinants in this unified model. However, gender, age, experience and voluntariness of use are defined as key moderators in this unified model.

To better understand the UTAUT by Venkatesh, Morris, and Davis (1989), the definition of four main constructs and the relationships among variables are revised below.

Performance expectancy is defined as "the degree to which an individual believes that using the system will help him or her to attain gains in job performance." This definition is adapted from "perceived usefulness" based on TAM's Davis (1989) and Davis *et al*. (1989). The

performance expectancy is proved to be the most influential predictor of intention and has a strong impact on both formal and informal educational settings. In addition, “the influence of performance expectancy on behavioural intention is moderated by both gender and age, such that effect will be stronger for men and particularly for younger men” (p. 450).

Effort expectancy is defined as “the degree of ease associated with the use of the system.” This definition is adapted from “perceived ease of use” based on TAM’s Davis (1989) and Davis *et al*. (1989). The influence of effort expectancy on behavioural intention is “moderated by gender, age, and experience, such that the effect will be stronger for women, particularly younger women, and particularly with limited experience” (p. 450).

Social influence refers to the extent to which a person thinks that he or she should do something or use the new technological system based on the belief of his or her important others. The influence of social influence on behavioural intention is moderated by “gender, age, voluntariness, and experience, such that the effect will be stronger for women, particularly older women, particularly in mandatory settings in the early stages of experience” (p. 453).

Facilitating conditions are conceptualized as the extent to which “an individual believes that an organizational and technical infrastructure exists to support use of the system” (p. 453). Unlike other important constructs, facilitating conditions do not influence on behavioural intention. The influence of facilitating conditions on usage is moderated by age and experience, such that the effect is more successful for older people, especially with accumulated experience.

The four important constructs have a direct effect on behavioural intention; therefore, the more behavioural intention an individual possesses, the more positive influence one has on usage.

The current study would like to follow TAM by Davis (1989) and Davis et al. (1989) as a fundamental foundation to understand students' acceptance of using technology in general. Moreover, the study would like to figure out other variables that may affect students' acceptance and the use of technology based on UTAUT by Venkatesh, Morris, and Davis (1989).

3.4 Theories of social interaction and learning

According to Lantolf and Thorne (2006), sociocultural theory (SCT) is a developmental philosophy related to higher mental functions that originates from the studies of Russian psychologist L.S. Vygotsky and his colleagues. There has been a large amount of research from multidimensional perspectives to show that there are strong relationships between culture, language, and cognition, which is the most associated with educational settings where communication, information, and behavioral processes are designed to build additional environments for learning and development. Similarly, Wertsch (1995) claimed that "the goal of [such] research is to understand the relationship between human mental functioning, on the one hand, and cultural, historical, and institutional setting, on the other" (p. 56).

Sociocultural terminologies

In order to understand the theory better, it is necessary to clarify the sociocultural terminologies. The term "sociocultural theory" that is widely used in many different research areas aims to directly link the research of Vygotsky and the convention of Russian cultural-historical psychology, particularly within the field of applied linguistics. Furthermore, the theory's central point is the influence of culturally organized and socially imposed meanings on the forming and featuring spiritual activities (Lantolf & Thorne, 2006).

Developing a sociocultural orientation to language and communicative activity (p. 3)

Although any suggested model and/or theory may be conceptualised explicitly, a clear explanation about what language is and how language affects the ways of thinking and communication are still a challenge to many approaches to researches in the SLA field (Lantolf & Thorne, 2006). In a similar vein, Mitchell and Myles (1998, p. 161) reported that SCT researchers "do not offer any very thorough or detailed view of nature of language as formal system." The authors wonder the theory sees language as a system based on disciplines, or 'a patchwork of prefabricated chunks and routines, available in varying degrees for recombination?' In other words, apparently, SCT will be a specific tool to deal with mediation and L2 learning. In this sense, cognitive linguistics plays as an appealing part for SCT due to culturally organized meaning (i.e., conceptual metaphors). From the perspective of languaculture and cognitive linguistics, process of studying a new language is not only acquiring new aspects for already existing knowledge, but also forming a way of re-moderating an individual's communication with the world and with one's own psychological essence.

Sociocultural history

As described above, sociocultural theory of mind is famously known as SCT, which was originally from the work of Soviet psychologist Lev Vygotsky (1978, 1981). The theory was further evolved by his Soviet associates (e.g., Leontiev, 1978), as well as by Western researchers in the field of psychology and education (e.g., Wells, 1999; Wertsch, 1991). In the perspectives of applied linguistics, James Lantolf was the pioneer to apply the theory to the field. Furthermore, SCT was used as a framework to evaluate how second language (L2) speakers use their L2 to facilitate their language production when trying to accomplish difficult tasks (Frawley & Lantolf, 1985).

Luria (1973) claimed that SCT regards the evolution of all complex human cognitive activities, consisting of studying the first and subsequent languages as social attributes and mediated by primitive tools (e.g., texts, gestures). However, there were some contradictory opinions about the rapid growth of concepts attempting to explain SLA and specifically theories, such as SCT, which regards language teaching as a social dimension rather than human cognitive activities (e.g., Gregg, 1993; Long, 1990).

Theoretically, it is necessary to realize that SCT is not designed for second language learning but rather for psychological areas that describes how mental abilities are developed (e.g., memory, unintentional attention) transformed into distinctively human higher order cognitive abilities (e.g., purposive memory, elective deliberation, planning), which humans, unlike other kinds, can take control. The fundamental concept in SCT is that the higher order cognitive competencies are formed in contextually communicative environments between a skilled member in the constructed community (e.g., a senior, a more capable peer) and a new member (e.g., a junior, a less capable peer). These communications are supported by substantial tools (e.g., phones, computers) or illustrative tools (e.g., signs, language). These tools not only foster interaction into practice, but also allow humans to be able to solve their problem as well as to develop higher order capacities (Storch, 2002, p. 70). Furthermore, she mentioned later that cognitive features within SCT initially occur in social interactions between humans and these interactions are eventually transferred into individuals. This transformation is viewed as increasing shifting: the novice is shifted from being object-regulated to being other-more-capable-regulated and gradually to being self-regulated.

3.5 Community of Inquiry

Learning experience is developed within a Community of Inquiry (CoI) that considers teachers and students as the fundamental parts in the educational process. The model of this Community of Inquiry suggests that learning occurs within the Community through the interactive connection of three main elements. Figure 3.5 shows the three crucial elements: cognitive presence, social presence, and teaching presence (Garrison, Anderson, & Archer, 2000)

Figure 3.5. Community of inquiry framework (Garrison, Anderson & Archer, 2000)

The CoI framework has been applied in wide spread of researches and practice of online and blended learning contexts (Shea & Bidjerano, 2008, 2009a, 2009b; Ke, 2010; Kupczynski, Ice, Weisenmayer & McCluskey, 2010; Lee, 2014; Morueta, López, Gómez & Harris, 2016; Rubio, Thomas & Li, 2018). Figure 3.6 shows the Community of inquiry elements, categories and indicators (Garrison, Anderson & Archer, 2000).

ELEMENTS	CATEGORIES	INDICATORS (examples only)
Social Presence	Open Communication Group Cohesion Affective Expression	Risk-free expression Encourage collaboration Emoticons
Cognitive Presence	Triggering Event Exploration Integration Resolution	Sense of puzzlement Information exchange Connecting ideas Apply new ideas
Teaching Presence	Design & Organization Facilitating Discourse Direct Instruction	Setting curriculum & methods Sharing personal meaning Focusing discussion

Figure 3.6. Community of inquiry elements, categories and indicators

As can be seen in Figure 3.6, each of three essential elements of the CoI consists of three sub-categories. Social presence includes open communication, group cohesion and affective expression. Cognitive presence is constituted of triggering event, exploration, integration and resolution. The last element—teaching presence—consists of design and organization, facilitating discourse and direct instruction.

In the current study, the instructor creates the online learning environment within CoI framework. The instructor would like to figure out how each element has an affect into the whole learning process in general and the CoI model in particular. Moreover, it is believed that understanding the relationship between these factors and their categories can help teachers to foster task engagement outside of class and lead to successful learning and teaching outcomes.

3.6 Summary

A look at the range of theories that are applicable to learning through technology outside of class attest to its complexity, and it is unfeasible to believe that a single theory would be capable of explaining the processes that occur. Motivation and autonomy are related constructs but in themselves do not account for what happens through learning with technology, and attitudes

towards technology can have an impact on both motivation and autonomy. Similarly, technology can be useful for learners who possess sufficient skills to use it, but skills in themselves are not an accurate predictor of actual usage. Communities have been shown to possess the conditions required for learners to interact and work towards autonomy but once again, the individual context is likely to impact the ways in which learners interact with one another and the teacher in these communities. At the same time, skills and attitudes towards technology will also play a role in determining the degree to which learners maximise upon the available communities of which they are a part. To conclude, while active participation in online communities is hypothetically a feasible way of having learners engage actively in learning, there are a range of factors that make it difficult to predict the final outcomes or attitudes, which was the motivation for the current study. The methodology for this study is described in the following chapter.

Chapter 4: Methodology

4.1 Introduction

The purpose of the study is to explore how social interaction can be used as a support for engaging in language learning activities outside of the classroom, and to determine how social and cognitive aspects of teacher presence can encourage task engagement. The study was an exploratory study which took place over a three-semester period at two private universities in Tokyo. The data were divided into two proxy control groups (Group A & Group B) and four treatment groups (Group TA, TB, TC, TD respectively). Figure 4.1 shows the timing for collecting the subjects for the study. For the proxy control groups (n=48), subjects were given vocabulary lists for each lesson covered in the textbook. Learners were shown in class how to use Quizlet to make vocabulary lists and how to study on the listening website Randall's ESL Lab for self-study, and how to study. Students were encouraged to show their completed lists and what they had listened on the website to the teacher in the next class or send what they have done to the teacher by email. Students could contact the teacher using email if they had problems.

For the treatment groups, SNS support (n=61), subjects were given vocabulary lists for each lesson covered in the textbook. Learners were shown in class how to use Quizlet to make vocabulary lists and how to study on the listening website Randall's ESL Lab for self-study, and how to study. Students were encouraged to send their completed tasks to the teacher using LINE. Students could contact the teacher using email or LINE if they had problems.

Two proxy control groups A & B are the same participants as those in the treatment groups TA & TB but in a different semester. This study would like to use the same subjects to give them equal treatment with different groups so that they could get benefits from the study.

The teacher reminded and encouraged students to do Quizlet activities and listening activities; however, both activities were optional.

Time		Subject name	Categorised	Subject name	Categorised
2016	First semester	Class A	Proxy control A (CA)	Class B	Proxy control B (CB)
	Second semester		Treatment A (TA)		Treatment B (TB)
2017	First semester	Class C	Treatment C (TC)	Class D	Treatment D (TD)

Figure 4.1. Timing for collecting the subjects

4.2 Research Questions

As described in the previous chapters, the literature identified that there has been much support from technology for interactions outside of formal class time for learners of English in order to enhance proficiency in a variety of different aspects. In recent years, many second language teachers have begun integrating online social platforms into formal learning environments, which creates a learning community for participants, expecting that it will in some way enhance the second language proficiency of their learners, especially task engagement. As yet, however, the literature is rather unclear as to whether or not this is indeed the case, and viewpoints tend to be varied with no clear consensus on whether or how task engagement is promoted by such online interactions. Thus, the following research questions were posed for the current study to further our understanding of the role of teacher presence through social interactions on the task engagement:

RQ1: What is the nature of the discussion carried out by participants in online social interaction outside of class?

RQ1a: What is the role of the teacher in facilitating discussion?

RQ1b: What are learner preferences for individual and group social interaction?

RQ2: How do learners perceive online social interaction as a support for language learning outside of class?

RQ2a: Is there a difference in attitude towards learning when learners participate in online social interaction compared to when they do not?

RQ2b: Do learners feel the presence of the teacher is a support mechanism in learning outside of class?

RQ2c: How do the learners perceive teaching presence, cognitive presence, and social presence in the interactions?

RQ3: How does teacher presence affect online discussion and task engagement?

4.3 Method

4.3.1 Subjects

Participants in the study were 109 Japanese students in four intact classes at two private universities in Tokyo. Note that pseudonyms are used for all students who participated in the study. All were beginners of listening and speaking classes. All of the same students were in four classes in the first and second semesters of the 2016 and 2017 academic year. Despite being in different years, the level was comparable, and a different but equivalent commercial textbook with the Common European framework (CEFR) level A1-A2 was used in each class. All students had a smart phone, with iPhones being the selected by the vast majority of the students, with around 85% ownership.

Table 4.1 Subject distribution

Subjects	First semester 2016	Second semester 2016	First semester 2017
Class A	CA (n=17)	TA (n=17)	
Class B	CB (n=31)	TB (n=31)	
Class C			TC (n=31)
Class D			TD (n=30)
Total	n=48	n=48	n=61

4.3.2 Instruments

Quizlet: This is a mobile and web-based study application that allows learners to study language vocabulary via learning tools and games. It is convenient that Quizlet can be used on all digital devices and computers as well. Learners can search the existing sets they would like to study and save to their folders or they can make their own study sets. Quizlet provides many different learning modes for the users as followings:

- Flash cards: This function is designed similarly as paper-version flash cards. Learners can set up the card with the target language along with audio. The card has two sides, which can be an image, a word, or both.

- Learn: This study mode is formulated with the study sets, learners can do some basic settings, for example learners can turn on autoplay audio, select the answer with target language or mother tongue or choose the question types such as flashcards, multiple choice or written form. This mode allows learners to see their learning progress over time with the frequency of correct words or the master level.

- Write: In this writing mode, learners have to fill in the blank with the correct definition of what is shown on the screen. Learners can check if the definition they write is correct or not with the help of "Don't know" button and can re-write until they get to the level they want.

- Match: This study mode is considered as matching game. Learners match all of the terms with their definitions. If they pick the wrong match, extra time will be added. The ones with the shortest time will get the notification that they are the first or second or third winner of that study set.

- Test: This study mode is designed for users to check what they have learned from other study modes. They can know the score after finishing the test and re-do the test as many times as they want to get the desired score.

Moreover, the Quizlet app allows learners to complete the tasks in as short a time as possible. One function in Quizlet that is perceived as being helpful for language learners is the audio function which allows students to practice pronunciation as doing the activities. Even Quizlet isn't designed to evaluate leaner abilities, teacher can track what their students have done with the teacher account. In the present study, the students created their own set of vocabularies based on the handouts distributed in class. Also, the students can share their created folder or study sets to class group so that other members can follow and study.

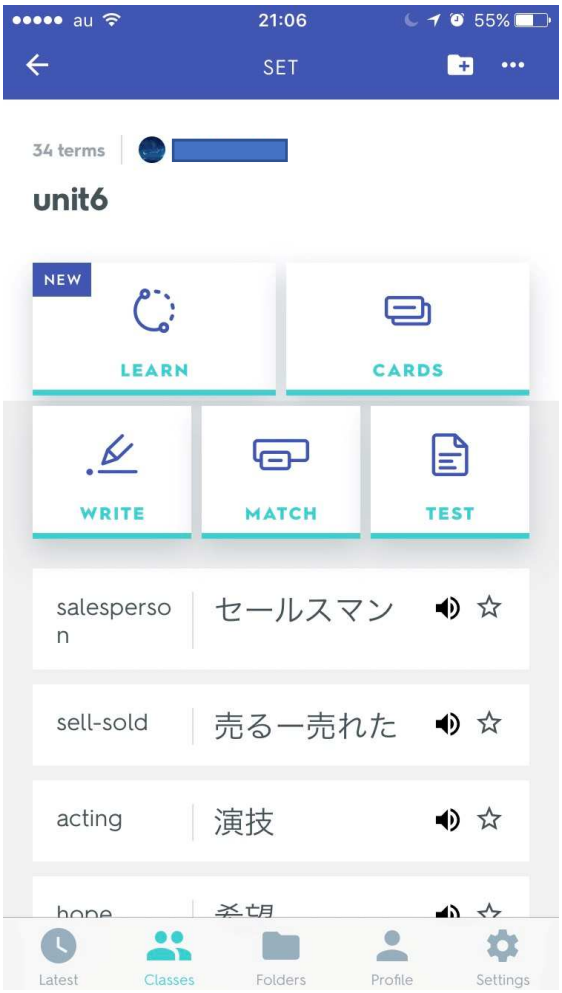


Figure 4.2. Sample of Quizlet set

Randal's ESL Cyber Listening Lab: This is a free website is designed to give English learners and teachers supplementary materials to study, practice and teach listening comprehension skills. The listening tasks are divided into three different levels including Easy, Medium and Difficult. The students in this current study were encouranged to listen the Easy parts.

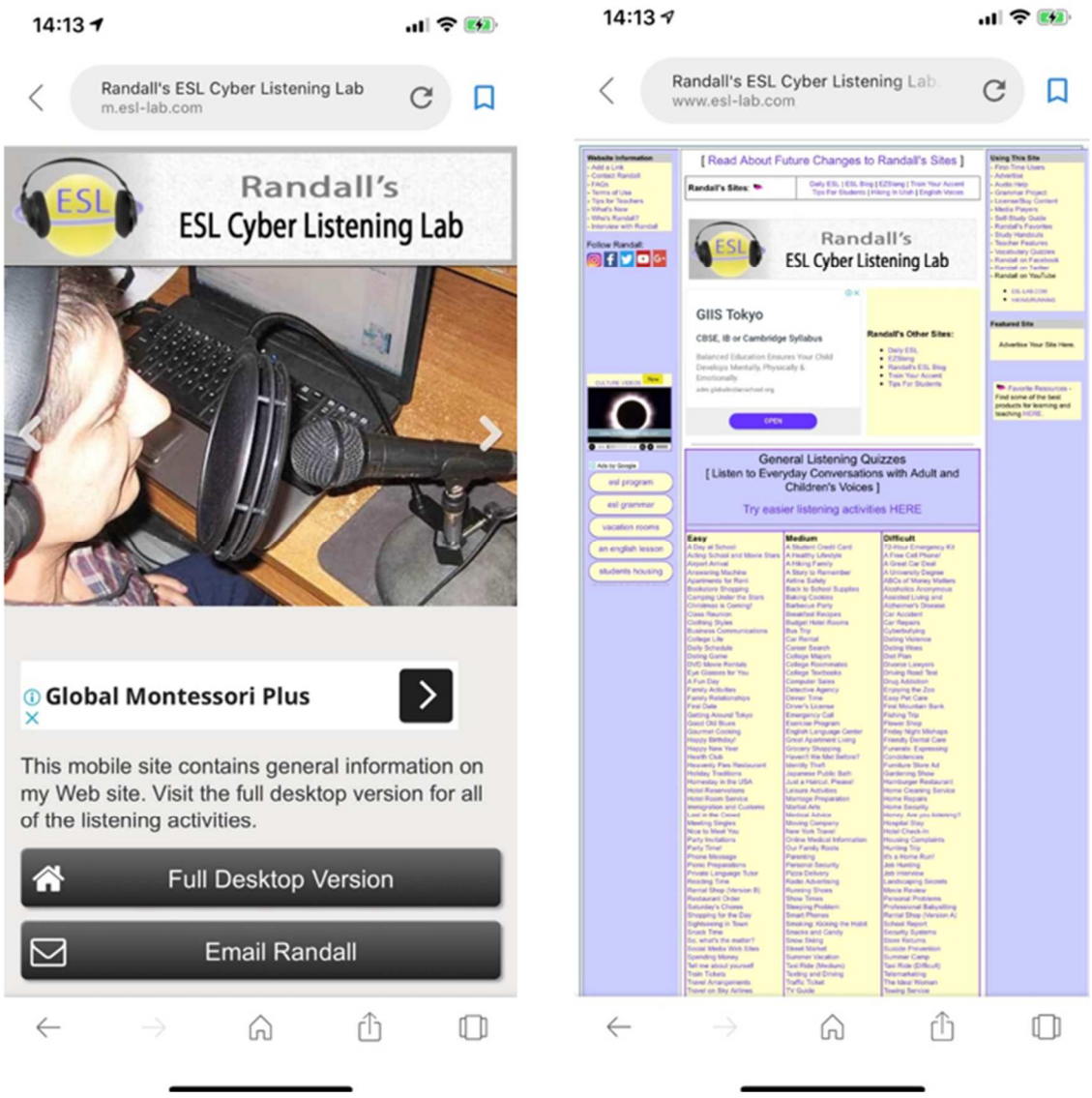


Figure 4.3 Sample of the listening website - Randal's ESL Cyber Listening Lab

LINE: A freeware messaging app for instant communications on electronic devices such as smartphones, tablet computers, and personal computers. LINE allows users to exchange messages, images, video and audio. In Japan, LINE is the messaging app used with the highest popularity, with nearly 97% of people in their twenties having an account (Ministry of Internal Affairs and Communication, 2017). All of the students in this current study had LINE accounts, and as a result LINE was selected as a social interaction tool in the present study. With the same account, LINE users can access from their smart phones as well as their personal computers.

Figure 4.4. Sample of LINE app

4.3.3 Procedure

The study was carried out over a three-semester period with 15 weeks each and divided as follow:

First semester 2016 (Proxy control groups A & B)

Week 1-2: Pre-treatment survey

Technical training for mobile Quizlet & the listening website

Week 3-4: Discussion of using Quizlet in class & the listening website

Dealing with technical difficulties and problems in class

Weeks 4-14: Discussion of learning in class

Week 15: Post-treatment survey

Focus group discussions

Second semester 2016 (Treatment groups AT & BT)

Week 1-2: Pre-treatment survey

Technical training for mobile Quizlet & the listening website & LINE

Week 3-4: Discussion of using Quizlet in class

Dealing with technical difficulties and problems in class

Introduction to using LINE for discussing learning

Weeks 4-14: Discussion of learning in class and on LINE

Week 15: Post-treatment survey

Focus group discussions

First semester 2017 (Treatment groups C & D)

Week 1-2: Pre-treatment survey

Technical training for mobile Quizlet & the listening website & LINE

Week 3-4: Discussion of using Quizlet in class & through LINE

Dealing with technical difficulties and problems in class & through LINE

Introduction to using LINE for discussing learning

Weeks 4-13: Discussion of learning in class and on LINE

Week 14-15: Post-treatment survey

Focus group discussions

Provision of training

For the proxy control group:

In the first semester, the learners were provided with technical training in detail in class in the first two weeks while ongoing strategic and pedagogical training were provided in class and in a combination of interactions through Email if learners had questions over the period of 15 weeks. The learners were shown how to use the website esl-lab.com for listing activities outside of class. The students were advised to keep the records of what they had done by taking a screen shot and sent to the teacher's email or showed to the teacher in the next class. Technical training was undertaken in detail in the first two weeks and included showing how to use the Quizlet app with showing the features of Quizlet and other functions as well as which listening tasks they should listen. Learners were able to show their Quizlet sets in class. Learners could also discuss their strategies in class ten minutes before the class finished.

In the second semester, the learners were provided with technical training in class, while ongoing strategic and pedagogical training were provided through interactions of LINE both individual and group chat over the period of 15 weeks. Similar to the first semester, technical training was undertaken in detail in the first two weeks and included showing how to use the Quizlet app including the features of Quizlet and other functions, but one extra feature of the second semester was to explain the usage of the LINE group and individual chat among teacher and learners for discussion outside of class. Further supplementary training was also carried out

in class in the following weeks to ensure learners were familiar with the functions of Quizlet. Strategic training was conducted in class and consisted of showing learners specific strategies on how to use Quizlet to learn vocabulary, including, for example, how to create a vocabulary set, how to set up listening function as writing or how to share the vocabulary set to classmates, and so forth. These strategies were not presented in one session, but in small chunks over the period of the study. Learners could also discuss their strategies through LINE group as well, and this was explained in class. Learners could show their Quizlet set through LINE and learners can send the screenshot from what they had listened on the website through LINE. Finally, pedagogical training was undertaken to facilitate learner understanding was to why they should use the technology to learn a language, in this case why they should use Quizlet to learn vocabulary.

For the treatment group:

For the treatment groups, the instructor provided the same method of training and setting up the same learning community as well as providing the same tools as in the second semester of the proxy control group. The instructor would like to see the attitudes between two different groups. The proxy control group CA and CB in the first semester became the treatment groups TA and TB. The teacher had some better experience in setting up LINE groups after the second semester of 2016 after in-class discussions and interviews. Thus, the treatment groups TC and TD in 2017 were expected to have more success in task engagement and social interactions than that of TA and TB.

4.3.4 Data Collection

Both qualitative and quantitative data were collected in the study. A pre-treatment survey was administered to identify basic demographic information such as experience with learning

through mobile devices and the technologies preferred by the participants, and to determine learner attitudes towards the prospect of learning through their mobile phones. A post-survey was used to find out how learners felt about using Quizlet for vocabulary learning and the listening website esl-lab.com for listening activities as well as LINE served as a forum for discussion about their learning. In addition, the first focus group discussions with proxy control group were held with three females and three males and the same number of the participants for treatment group in the latter semester to get the comparative view with and without SNS support and social interaction. The second focus group discussions with treatment group were held with six volunteers (all females even though the instructor planned six females and three males) to get better insights into learners' views of using their mobile phones for language learning and to find out why learners behaved as they did with both Quizlet app, the listening website and LINE. Furthermore, learners' interactions on LINE were analysed to determine the nature of the discussions that took place, along with the access logs and scores that were recorded in Quizlet. The focus group discussions were based primarily on the content of the post-treatment survey, but the discussion was not restricted to this.

At the beginning of each semester, subjects were administered pre-treatment attitude and background surveys to determine the demographics of the participants, showing that 100% students with a smart phone, with iPhones being the most popular. When asked about intention to study with smart phones (SP), subjects gave good reaction that they would like to use SP for studying with more than 64% saying yes for all groups. The study would like to see if the participants had intention to study with Quizlet or the listening website or not and the answers from the surveys gave a big relief with over 70% saying yes for liking to try Quizlet and more than 80% saying yes for agreeing to use esl-lab.com for self-study listening. About half of the participants had never downloaded any language learning apps before the study (42.6%, 56.4%,

65.9%, and 59.7% respectively); however, a similar number of the participants would like to pay nothing for language learning apps. When being asked to provide which skills participants wanted to learn through mobile devices, with listening skills and vocabulary accounted for the most out of the six features provided (listening, reading, writing, speaking, vocabulary & grammar).

Quizlet records were collected and analysed to evaluate learner engagement through online vocabulary activities. All the data through the listening website esl-lab.com sent through LINE were collected and analysed to evaluate learner engagement through online activities. All LINE logs in both individual (i.e., teacher-student and class group interactions) were collected for analysis for teacher and student interaction outside of classroom and for the nature of the interaction as well as the learning community. And records of all interactions with students and notes from in-class discussions with students were observed and analysed as well to support the validity of the data.

At the end of each semester, post-treatment attitude surveys were carried out and focus-group discussions were recorded to get a deeper view on social interaction and teacher presence through support of online activities. Table 4.2 shows the identity perceptions of social networking in the treatment groups TA and TB while Table 4.3 reveals identify usage, attitudes and autonomy in the treatment groups TC and TD.

Table 4.2: Identify perceptions of social networking

Subjects were 48 students in two intact classes (31 + 17). Subjects were given the choice to sign up for the LINE group for the class in the first and second class.

Pre-treatment attitudes (n=48)

1. Background information
2. Motivation and attitudes towards studying English
3. View of learning through mobile devices
4. Intention to learn through Quizlet
5. Intention to learn through Randal's ESL Cyber Listening Lab
6. Perception of teacher's role in supporting learning

Post-treatment attitudes (n=48)

1. Background information
2. Motivation and attitudes towards studying English
3. View of studying through mobile devices
4. Information about how learners used and perceived Quizlet
5. Information about learners used and perceived Randal's ESL Cyber Listening Lab
6. Perception of teacher's role in supporting learning

Post-treatment focus group (n=6)

8 learners were asked to participate in a focus group. However, actual number was 6

Quiz Scores (n=48)

Bi-weekly quiz scores were analyzed over the semester → effect from LINE?

Analysis of all LINE interactions (n=48)

Analysis of both individual and group LINE interactions → correlate with tasks

Table 4.3: Identify usage, attitudes and autonomy

Subjects were students in two intact classes (30+31). Subjects were given the choice to sign up for a LINE group for the class in the first and second class.

Pre-treatment attitudes (n=61)

1. Background information
2. Motivation and attitudes towards studying English (Intrinsic Motivation Inventory)
3. Attitude towards learning in the course (Perceived Competence Scale)
4. View of learner autonomy (Self-Regulation Questionnaire)
5. Attitudes towards technology (Technology Acceptance Model)
6. Perception of teacher's role in supporting learning (Teacher presence)

Post-treatment attitudes

1. Background information
2. Motivation and attitudes towards studying English (Intrinsic Motivation Inventory)
3. Attitude towards learning in the course (Perceived Competence)
4. View of learner autonomy (Self-Regulation Questionnaire)
5. Attitudes towards technology (Technology Acceptance Model)
6. Perception of teacher's role in supporting learning (Teacher Presence)

Post-treatment focus group

Learners who fit into each category to be asked to participate in a focus group

Quiz Scores

Bi-weekly quiz scores were analyzed over the semester → effect from LINE?

Analysis of all LINE interactions

Analysis of both individual and group LINE interactions → correlate with tasks

Quizlet engagement logs

Analysis of both individual and group LINE interactions → task engagement

4.3.5 Data Analysis

After collection and arranging, the data were ready for analysis. The first stage of the analysis consisted of sorting out the scale in the surveys, inputting all LINE logs, transcribing interviews, investigating in-class observation notes and finally comparing Quiz scores. The procedure of how each data category was analyzed as following.

a. Surveys

For proxy-control groups:

The pre-survey was collected, and a scale created to categorize different elements including background information, motivation and attitudes towards studying English, view of learning through mobile devices, intention to learn through Quizlet, intention to learn through Randal's ESL Cyber Listening Lab and perception of teacher's role in supporting learning. Next, the numerical data of the questionnaires were inputted into Excel into designated scales. The open questions of the questionnaires were checked for consistent themes that could help to identify the trends.

Here is an example of one of the questionnaires in the pre-survey for proxy-control group. The full version of the surveys can be seen in appendices.

"1. How long do you plan to spend on the Quizlet vocabulary activities each week? Please circle the appropriate amount.

a. Not at all
b. Less than 30 minutes
c. 30 – 60 minutes
d. More than 60 minutes

Please give your reasons.

2. If you were to buy an app for language learning, how much would you be prepared to pay? Please circle the appropriate amount.

a. 0 yen
b. Less than 100 yen
c. Between 100 yen and 300 yen
d. Between 300 yen and 500 yen
e. Between 500 yen and 1000 yen
f. If necessary, more than 1,000 yen"

At the end of the semester, post-survey was collected and sorted out into the categories of background information, motivation and attitudes towards studying English, view of studying through mobile devices, information about how learners used and perceived Quizlet, information about learners used and perceived Randal's ESL Cyber Listening Lab and perception of teacher's role in supporting learning. The differences and similarities of the pre-survey and post-survey were compared to make some conclusion of some general trends and make some suggestions for the next stage of surveys for the treatment groups.

Here is an example of one of the questionnaires in the post-survey for proxy-control group to have an overview of students 'attitudes toward studying with smart phones. The full version of the surveys can be seen in appendices.

"1. What do you think was <u>good</u> about using your mobile phone for language learning?

_____

_____

2. What did you think was bad about using your mobile phone for language learning?

_____

_____

3. How long did you spend on the Quizlet vocabulary activities each week? Please circle the appropriate amount.

a. Not at all
b. Less than 30 minutes
c. 30 – 60 minutes
d. More than 60 minutes

Please give your reasons."

Also, the following example is one of the questions in the survey to figure out students' trend in studying or doing the task outside of class.

"How do you study English outside of class?

a. Just do what the teacher told
b. Listen or watch English websites to study
c. Read English books
d. Use the study apps to study
e. Talk to friends in English
f. Others: _____
g. I don't study outside of class"

For treatment groups:

Similar pre-surveys were collected and categorized with background information, motivation and attitudes towards studying English (Intrinsic Motivation Inventory), attitude towards learning in the course (Perceived Competence Scale), view of learner autonomy (Self-

Regulation Questionnaire) and attitudes towards technology (Technology Acceptance Model). Next, the numerical data of the questionnaires were inputted into Excel based on the theoretically designed scales. The open questions of the questionnaires were checked for consistent themes that could help to identify the trends.

At the end of the second semester of 2016 and the first semester of 2017, post surveys were collected and analyzed in terms of background information, motivation and attitudes towards studying English (Intrinsic Motivation Inventory), attitude towards learning in the course (Perceived Competence), view of learner autonomy (Self-Regulation Questionnaire), attitudes towards technology (Technology Acceptance Model) and perception of teacher's role in supporting learning (Teacher Presence). The differences and similarities of the pre-surveys and post-surveys were compared to see the change in students' attitudes and views on teacher presence.

Here is an example of the questionnaires in the post surveys in order to figure out the role of teacher presence during the learning process. The full version of this survey can be found in appendices.

> This questionnaire contains items that are related to your experience with your instructor in this class. Instructors have different styles in dealing with students, and we would like to know more about how you have felt about your encounters with your instructor. Your responses are confidential. Please be honest and candid.
>
> 1 2 3 4 5 6 7
>
> Strongly disagree neutral strongly agree

1. I feel that my instructor provides me choices and options. 1 2 3 4 5 6 7

2. I feel understood by my instructor. 1 2 3 4 5 6 7

3. I am able to be open with my instructor during class. 1 2 3 4 5 6 7

4. My instructor conveyed confidence in my ability to do well in the course. 1 2 3 4 5 6 7

5. I feel that my instructor accepts me. 1 2 3 4 5 6 7

b. LINE logs

All the messages in LINE groups and LINE individuals were collected and examined for the quantity and nature of the discussions of both the teacher and the participants in the individual and group chats. The nature of discussion was divided into the 15 following categories.

- Greeting
- Announcement
- Reminder
- Explanation/ advice
- Encouragement
- Apology
- Request for information
- Acknowledgment
- Narrative
- Sticker
- Quizlet test picture
- Audio files
- Link shared

- Handouts
- Listening Activities pictures

The content of the messages was analyzed according to meaning units. Please have a look at the following example for the clarification.

14:43 Mikiko"Hello.Tran sensei. Here is my homework."

14:43 Mikiko [Photo]

14:43 Mikiko [Photo]

14:43 Mikiko [Photo]

14:43 Mikiko [Photo]

14:43 Mikiko [Photo]

19:34 Teacher "Very good! Thank you. Enjoy your weekend and see you on Monday!"

09:25 Teacher Morning Mikiko! I received your homework. They're good! But please try to listen again to practice pronunciation. And try to do the exercises following the listening too.

In order to have the total number of meaning units in the messages in LINE interactions, the messages were calculated into meaning units with the formula COUNTIF in the excel file.. One message could include more than one meaning unit as Table 4.4 shows.

Table 4.4 Sample of how messages were analyzed into meaning units

Time	Name	Messages	Meaning Units														
			Greeting	Announcement	Reminder	Explanation / advice	Encouragement	Apology	Request for information	Acknowledgment	Narrative	Sticker	Quizlet test picture	Audio files	Link shared	Handouts	Listening Activities
14:43	Mikiko	Hello.Tran sensei. Here is my homework."	y								y						
14:43	Mikiko	[Photo]															y
14:43	Mikiko	[Photo]															y
14:43	Mikiko	[Photo]															y
14:43	Mikiko	[Photo]															y
14:43	Mikiko	[Photo]															y
19:34	Teacher	"Very good! Thank you. Enjoy your weekend and see you on Monday!"	y				y				y						
22:04	Mikiko	Good evening. Here is my homework.	y								y						
09:25	Teacher	Morning Mikiko! I received your homework. They're good! But please try to listen again to practice pronunciation. And try to do the exercises following the listening too.	y			y	y			y							
		Total	4	0	0	1	2	0	0	1	3	0	0	0	0	0	5

d. Interviews

Learners' views of using Quizlet app and Randal's ESL Cyber Listening Lab as well as their preference of interactions in LINE group and LINE individual were extracted from the interviews. Also, students' views in the interviews on some technical problems of Quizlet and the listening website were analyzed. Moreover, learners' views about teacher presence in support of task engagement outside of class were investigated and other relevant comments or trends were also examined.

e. In-class observation notes

The teacher took notes through class observations in order to investigate to see if students asked about LINE, Quizlet, the listening activities or any class or non-class related matters**.**

e. Quiz data

Quiz data from proxy control groups and treatment groups were compared with and without Quizlet and the LINE interactions. All the Quiz scores were inputted into excel file and calculated Mean (M) and Standard Deviation (SD). If the SD was high, which meant there were more variations between students and vice versa.

4.4 Reliability

In order to ensure the reliability of the subjective data (i.e., the content analysis of the LINE interactions), approximately 10% (350) of the interactions from both the class and individual interactions were rated by a second naïve rater. This rater was fluent in both Japanese and English and had previous experience in carrying out content analyses. A Pearsons product-moment correlation coefficient analysis was carried out on the rating to reveal a correlation of r=.84, which was considered to be sufficiently accurate for the data to be reliable. After carrying out the correlation of the data, the second rater was contacted periodically to check the rating of the researcher when there were interactions that the researcher felt would benefit from a second opinion.

The results of the study are described in the following chapter.

Chapter 5: Results

5.1 Introduction

This chapter describes the findings of the study. First of all, the analysis of pre-treatment attitude and background surveys were carried out in order to discover students' attitude towards using technology for studying foreign languages. In the next steps, Quizlet records and listening activities records were analysed to get an overview of learners' engagement. In order to see the general trend for social interactions, LINE logs from class groups and LINE logs from individual interactions between teacher and students were collected and analysed. Besides Quizlet, listening and LINE records outside of class time, records of notes from in-class discussions with students were also observed and analysed in order to make the data sets more valid. At the end of each semester, post-treatment attitude surveys were conducted to understand the differences and similarities of students' attitude towards using technology for language learning as well as attitudes towards the learning environment through LINE outside of class time. Interviews among students in the focus groups were recorded to have in-depth thoughts from students towards the whole process of studying throughout the semesters. Finally, bi-weekly quiz scores were compared among proxy control groups and treatment groups to realize if there was any difference in improving scores throughout the semesters. In the analysis, overall features of social interactions and learner engagement through LINE were performed and clarified. After all, there was a brief comment on the results as well.

5.2 Pre-treatment attitude and background surveys

As can be seen in Table 5.1, background surveys for four classes served as primary data to figure out any variations in understanding towards using technology for language learning. In the first semester of the first year 2016, Class A and Class B which were treated as proxy control groups (CA and CB) supported in class for using Quizlet and listening activities, with the

opportunities for using email if the students have any problem. However, there were no cases of email being sent to the teacher in terms of technology usage or technology problem. On the contrary, five students sent email to the teacher to ask about how to buy the textbook as well as to ask information about the test date, and to inform the teacher that they would be absent for the class because they were sick. In the second semester of the first year and in the first semester of the second year, Class A, Class B, Class C and Class D were regarded as treatment groups (TA, TB, TC and TD). These treatment groups were supported for using Quizlet and listening activities through LINE class group and individual LINE interaction with the teacher. From the background surveys, we can see the percentage of students who owned smart phones was quite high, with more than 75% for Class A and Class B and more than 83% for Class C and Class D. Even the high percentage of smart phones ownerships, the percentage of students who would like to use smart phones for learning was lower, with 64.7% for Class A, 70.9% for Class C and 66.7% for Class D. There was one exception applied for Class B when the percentage of smart phone ownerships and that of intention to study with smart phones were the same with 25 students, making up 80.6%. When asked about their intention to use Quizlet, there were positive answers from students, with over 83% for Class A and Class B, and over 74% for Class C and Class D. In a similar vein, students intended to do listening activities with a very high percentage, more than 80% for all classes. Regarding of students' experience of downloading language learning apps, Class A had 47.1%, making up the lowest percentage out of four classes. More than half of the students in Class B, Class C and Class D had experience of downloading language learning apps for studying, accounting for 54.8%, 64.5% and 60% respectively. Moreover, even in the survey, the instructor listed other skills that might be convenient or useful to study with smart phones, but students chose listening and vocabulary skills the most. This could be explained that these students were in listening skill classes. Although more than half of the students in four classes did not want to pay for language learning apps, there were more

than 20% of the students who were willing to pay if they think language learning apps are helpful and with reasonable price like 100 yen to 300 yen per an app.

Table 5.1: Background surveys

	Class A (N=17)	Class B (N=31)	Class C (N=31)	Class D (N=30)
Smart phone (SP) ownership	100% (76.5% iPhone:13 St)	100% (80.6% iPhone: 25 St)	100% (83.9% iPhone: 26 St)	100% (86.7% iPhone: 26 St)
Intention to study with SP	Yes: 64.7% (11 St)	Yes: 80.6% (25 St)	Yes: 70.9% (22 St)	Yes: 66.7% (20 St)
Intention to use Quizlet	Yes: 88.2% (15 St)	Yes: 83.9% (26 St)	Yes: 74.1% (23 St)	Yes: 76.7% (23 St
Intention to do listening on esl-lab.com	Yes: 82.4% (14 St)	Yes: 80.6% (25 St)	Yes: 83.9% (26 St)	Yes: 86.7% (26 St)
LL app download experience	Yes: 47.1% (8 St)	Yes: 54.8% (17 St)	Yes: 64.5% (20 St)	Yes: 60.0% (18 St)
Desired skills to learn with SP	1. Listening 2. Vocabulary	1. Listening 2. Vocabulary	1. Listening 2. Vocabulary	1. Listening 2. Vocabulary
Willing to pay for LL app	Nothing: 52.9% (9 St) 100-300 yen: 23.5% (4 St)	Nothing: 58.1% (18 St) 100-300 yen: 29.0% (9 St)	Nothing: 61.3% (19 St) 100-300 yen: 25.8% (8 St)	Nothing: 63.3% (19 St) 100-300 yen: 30.0% (9 St)

5.3 Quizlet records of learner engagement

As Figure 5.1 shows how many Quizlet activities the students did during the semester. Class CA and CB produced 221 and 217 activities respectively. Even though the number of students in class CA (n=17) was less than those of class CB (n= 31) but they did more activities. The fact that class CA was introduced Quizlet before taking this class, which could be the answer for the more activities done by this class since they knew how to do it. From the comparison of the engagement in Quizlet between the first and second semester within the same students but two different groups, namely CA versus TA and CB versus TB, we can see the number activities done in the second semester in TA (527) were more than double than that of the first semester in CA and the number activities of TB (642) in the second semester was nearly triple of that of CB in the first semester. However, when comparing the same treatment groups but different classes (class TC and TD). The number of Quizlet activities in TC and TD was even higher than those of TA and TB, 1101 and 1879 respectively. This can be explained by the fact that TC and TD were fresh students, they seemed to be keen on trying new things. Meanwhile students in TA and TB were already introduced to Quizlet in the first semester, they were used to it, therefore it took a smaller number of times to finish the activities. Moreover, in order to explain the engagement in Quizlet in treatment groups, it was possible that LINE group interaction was a collaborative environment where students could share freely and easily what they had achieved through Quizlet.

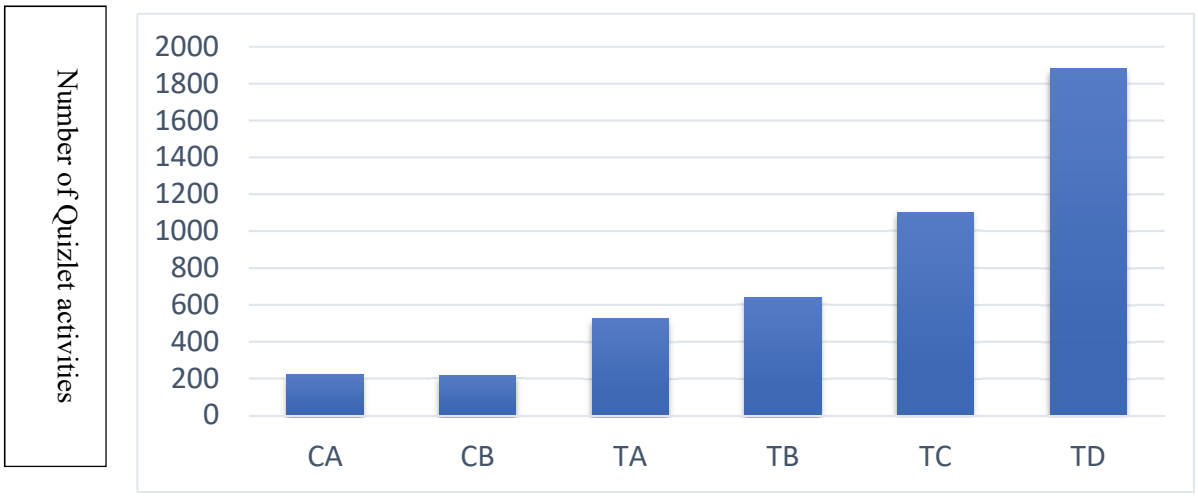


Figure 5.1. Quizlet engagement

As in Figure 5.2 shows a sample of Quizlet engagement with class progress. Quizlet activities include Learn, Flashcard, Write, Spell, Test, Match and Gravity. The green tick means students achieved the desired score for that activity. No colour in the activities mean students did not do anything. If some activities were black means students did that activity for some time but they did not reach the desired score.

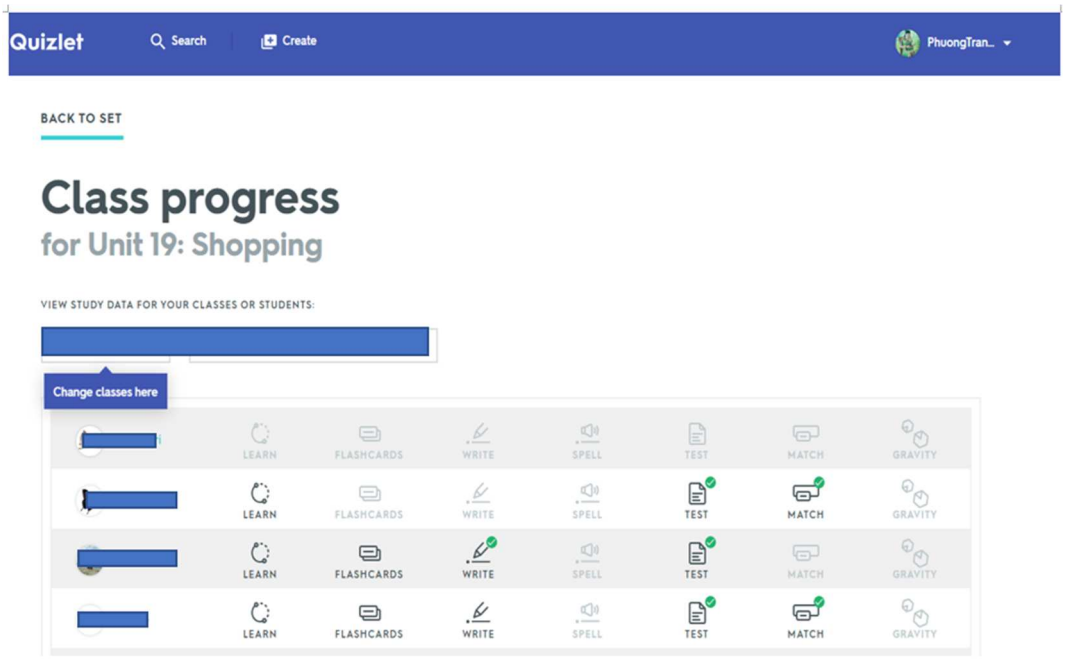


Figure 5.2. Quizlet engagement (class progress)

As Figure 5.3 reveals a sample of Quizlet engagement with individual progress, the green number means how many times the student did the activities. This was also how the teacher counted for the number of Quizlet activities done [(1)]. It is important to note that Quizlet app is not designed for testing and evaluation, therefore, the teacher had to count the activities manually at the end of each semester.

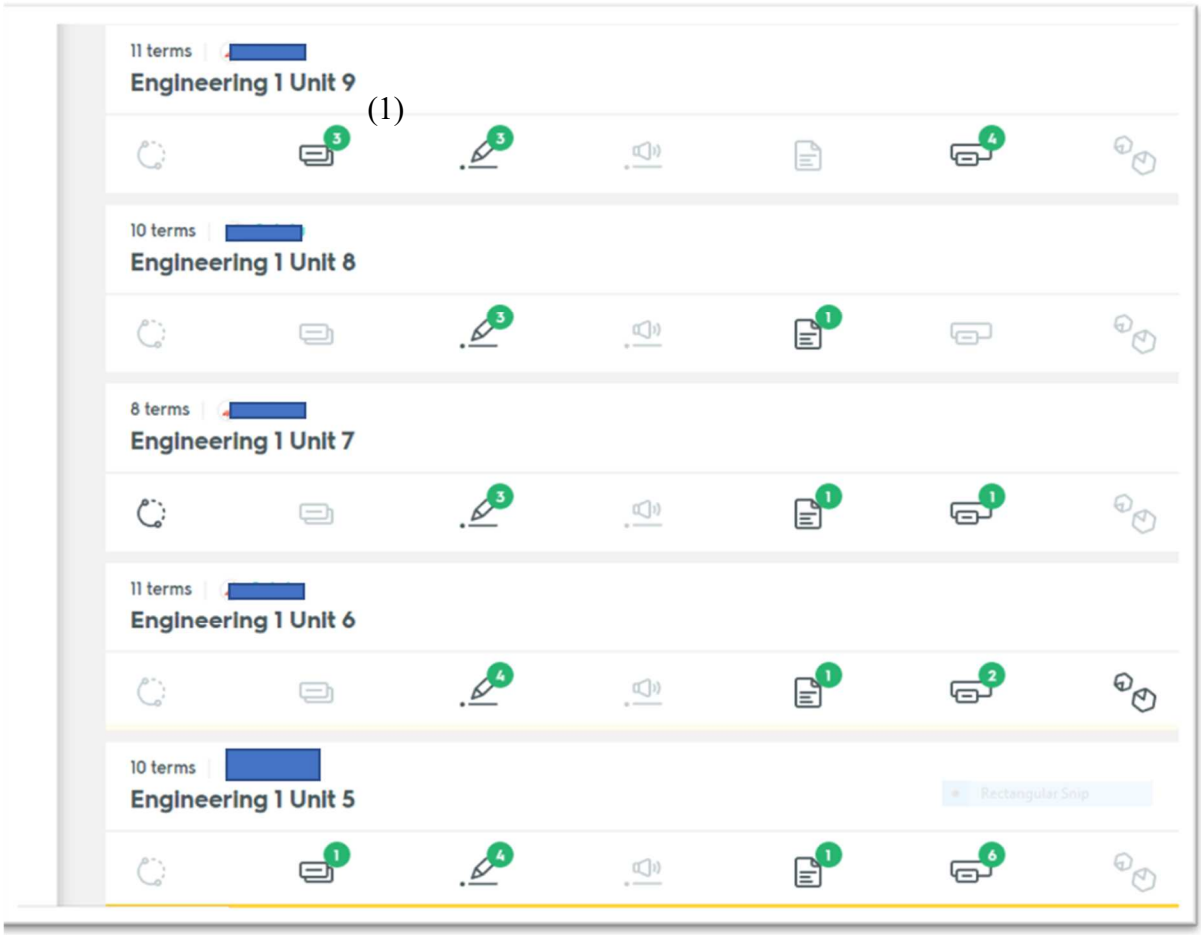


Figure 5.3. Quizlet engagement (individual progress)

As can be seen from Figures 5.4, 5.5, 5.6, and 5.7, Quizlet has game functions that are very interesting to play against the teacher and other students. Students could compete with the teacher and their classmates, after that they could receive notifications for their win or loss of their winning place comparing to other people in the class. As these figures show some samples on match score, we can see that the teacher lost her 1st place by 13.8 seconds in Figure 5.4. In another matching game as Figure 5.5 shows, the teacher lost her 1st place again by 2.8 seconds.

Students tried to win the 1st place in the game, therefore this could lead them to do this matching activity with higher frequency. As Figure 5.6 and Figure 5.7 show, the teacher lost her 2nd place and 3rd place respectively. Students who could beat the teacher to win the 1st or 2nd or 3rd place must be so happy and proud of themselves. This could be a positive motivation to do other activities.

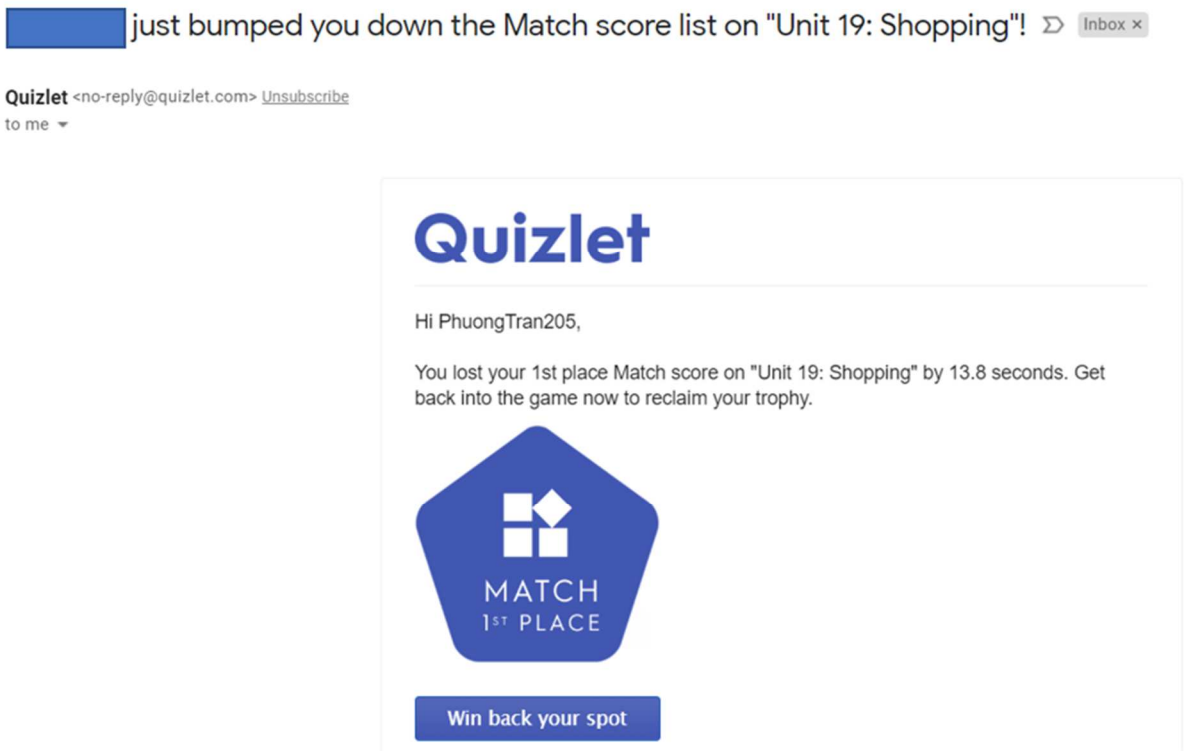


Figure 5.4. Match score A (1st place)

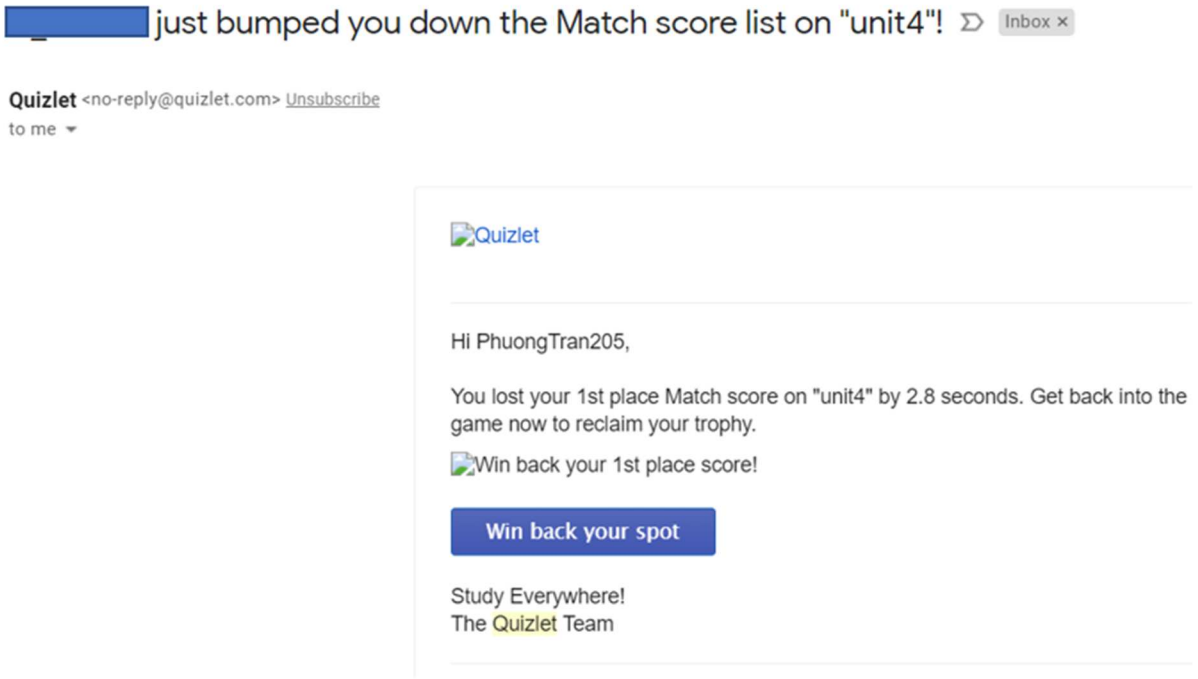


Figure 5.5. Match score B (1st place)

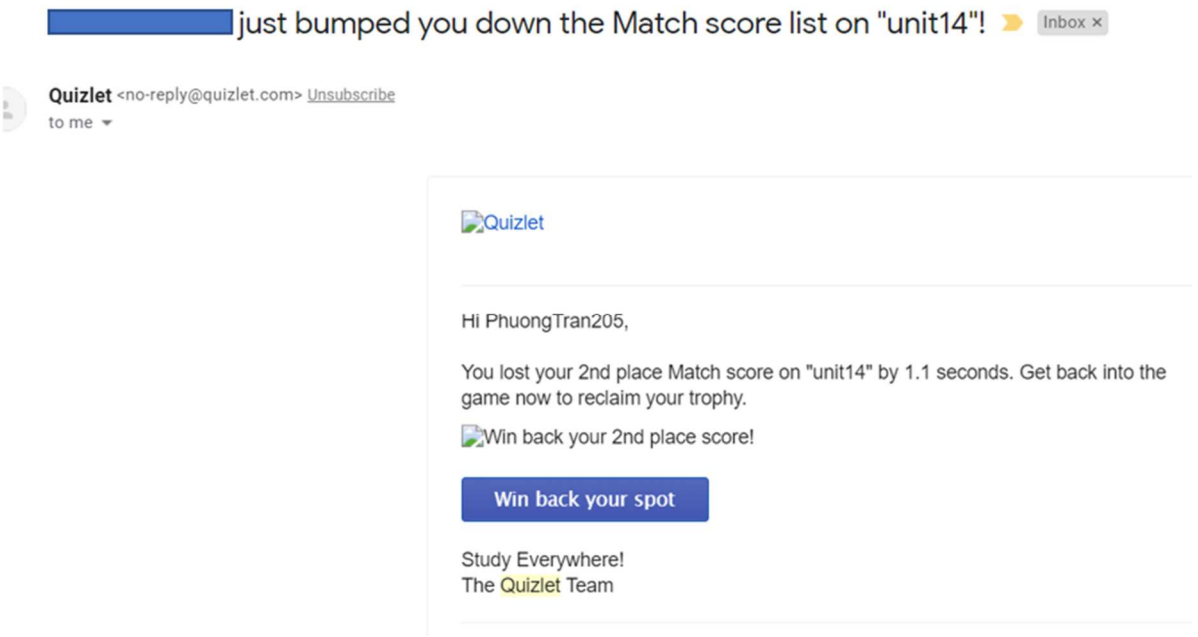


Figure 5.6. Match score (2nd place)

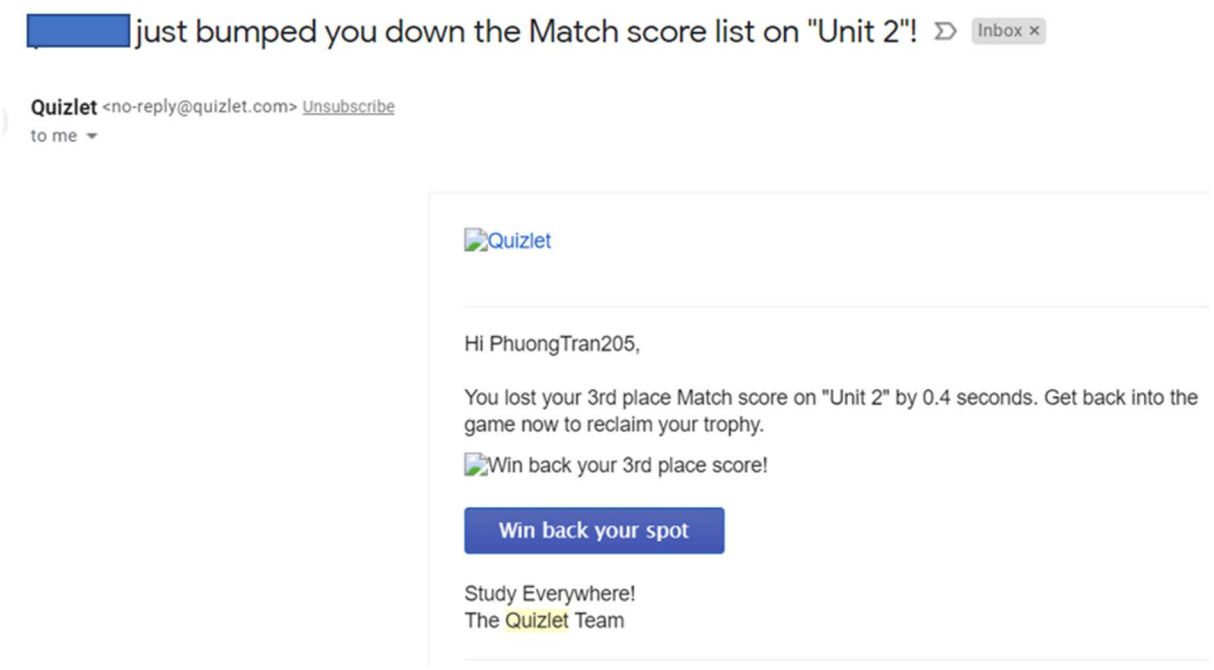


Figure 5.7. Match score (3rd place)

5.4 Listening records

For all proxy control groups and treatment groups, the teacher suggested ten listening units, which were related to the theme of listening activities students had during class hours as follows:

- Tell me about yourself
- Snack Time
- Reading Time
- A fun Day
- Social Media Web Sites
- Daily Schedule
- First Date
- Party Time
- Picnic Preparation
- College Life

to practise outside of class time through the semester. Each listening unit has 4 activities attached including multiple choice exercise, mixed-up sentence, sentence and vocabulary matching and text completion quiz. However, only multiple-choice exercise could be done with the smart phones, other activities had to be done through computer. Students could listen as many units as they wanted, however, from all the analysis, students did maximum ten units throughout the semester if they did any. There are more details for each group as follows.

As can be shown in Table 5.2, there were eight students out of 17 students in CA did the listening activities. They did not follow the teacher's suggestion of listening all 10 units. There were only two students listened five units, another two students listened 4 units, three students listened to three units and one student listened to only one unit. One noticeable figure here is that students did the multiple-choice exercises only with their smart phones, accounting for 29 activities in total. Note that pseudonyms are used for all students who participated in the study.

Table 5.2. Listening records from proxy control group A (CA)

Number	Names	Listening Units	Listening Activities
1.	Asuka	2	2
2.	Junpei	3	3
3.	Shougo	3	3
4.	Hiroyuki	3	3
5.	Yuya	4	4
6.	Yudai	4	4
7.	Moe	5	5
8.	Nobuki	5	5
TOTAL			29

In a similar vein with CB as Table 5.3 shows, there were only 12 students of out 31 students followed the teacher's suggestion and did listening activities outside of class. There was only one student listened 6 units, two students listened 5 units, one student listened 4 units, five students listened 3 units and three students listened 2 units. CB showed the similarity with CA in terms of listening activities they did. They only listened to the multiple-choice exercises through smart phones, which made up 41 activities in total.

Table 5.3. Listening records from proxy control group B (CB)

Number	Names	Listening Units	Listening Activities
1.	Aya	6	6
2.	Mikiko	5	5
3.	Karin	5	5
4.	Nonoko	4	4
5.	Manatsu	3	3
6.	Shinjiro	3	3
7.	Taisei	3	3
8.	Satoru	3	3
9.	Takahiro	3	3
10.	Naoki	2	2
11.	Tatsuya	2	2
12.	Hikaru	2	2
TOTAL			41

In comparison of CA and TA in terms of the number of students engaged into the listening activities and the number of activities that they did, Table 5.4 reveals the details. For this

semester, students in TA was introduced LINE, therefore they could report what they did through LINE. The number of students engaged into doing the listening activities increased dramatically, from eight out of 17 students up to 15 out of 17 students. In CA, there was no one did the ten listening units; however, in TA, there were five students who did all ten listening units as suggested. This shows as an encourage for the teacher. Moreover, there was one student listened to eight units, six units, and five units. There were three students listened to seven units and four students listened to four units. For this semester, some students understood that they needed to do listening activities such as mixed-up sentence, sentence and vocabulary matching and text completion quiz through computer, hence the number of listening activities also increases considerably, making up 208 activities in total. This figure in TA is around seven times higher than that of CA.

Table 5.4. Listening records from treatment group A (TA)

Number	Names	Listening Units	Listening Activities
1.	Asuka	10	10
2.	Yudai	10	10
3.	Moe	10	10
4.	Nobuki	10	10
5.	Naho	10	10
6.	Kentarou	8	8
7.	Shougo	7	28
8.	Natsuko	7	7
9.	Hiroyuki	7	7
10.	Tomoya	6	24
11.	Junpei	5	20
12.	Maho	4	16
13.	Sachiko	4	16
14.	Haruka	4	16
15.	Seino	4	16

TOTAL			208

In comparison of CB and TB in terms of the number of students engaged into the listening activities and the number of activities that they did, Table 5.5 shows the difference. In the second semester of 2016, students in TB were treated as treatment group using LINE for the training and for reporting what they listened outside of class. There was an enormous increase in the number of students engaged into doing the listening activities, from 12 out of 31 students up to 27 out of 31 students. In CB, there was no student showing that they listened to the ten listening units; however, in TB, there were seven students who listened to all ten listening units according to the teacher's suggestion. Once again, this engagement was perceived as an encourage for the teacher. In addition, there were two students who listened to nine units, seven units, six units, five units, four units and three units. There are four students did eight units and the other four students who listened to two units. One good thing from TB comparing with TA is that there were five students who listened to all tehn units and did all the activities following those units. The students were encouraged to do more listening activities with computer other than multiple-choice exercises through smart phones, therefore the number of listening activities also increases remarkably, accounting for 373 activities in total. The number of listening activities done in the treatment group TB is more than nine times higher than that of the proxy control group CB.

Table 5.5. Listening records from treatment group B (TB)

Number	Names	Listening Units	Listening Activities
1.	Manatsu	10	10
2.	Aya	10	10
3.	Haruka	10	10
4.	Haruna	10	40
5.	Nonoko	10	40
6.	Mikiko	10	40
7.	Koutaro	10	40
8.	Hikaru	9	9
9.	Karin	9	9
10.	Shinjiro	8	8
11.	Satoru	8	8
12.	Yuuta	8	8
13.	Naoki	8	32
14.	Kensuke	7	7
15.	Junichi	7	7
16.	Ryuya	6	6
17.	Yoshiki	6	6
18.	Kouki	5	5
19.	Kousuke	5	20
20.	Chikara	4	4
21.	Taisei	4	16
22.	Tatsuya	3	12
23.	Taro	3	12
24.	Takahiro	2	2
25.	Takuya	2	2
26.	Itsuki	2	2
27.	Junpei	2	8
TOTAL			373

With the success in listening activities engagement in TA and TB through LINE, the other treatment groups TC and TD were carried out in the same way. Table 5.6 displays the listening records from TC. Students in TC were encouraged to do all listening activities following each unit from the beginning of the semester and received the reminders about it through LINE as well, which had a great impact on the number of activities that students did, with 360 activities in total. Although the number of students who did the listening activities outside of class was not high, 17 students out of 31 students. This was noticed that most of the students did the listening activities were students who were engaged more in class and had higher paper-based quizzes' scores. This could be explained that the English level of the students in this class was one of the lowest levels at the same year according to their placement test, they were not so confident and did not have a habit of doing extra activities outside of class and reported to the teacher. However, there were seven students who listened to all ten listening units and all the listening activities following. The other two students did all ten listening units with only multiple-choice exercises. There was one student did eight units with 32 activities. There was one student did four units with 16 activities and another student listened to four units but just four activities. There was one student who did three units, one student who did two units and three students who did one unit. However, in comparison with TB and TC as the same number of students in the class (n=31), regarding the number of students engaged into the listening units and the number of activities actually did, TB had more students engage in the listening units (27 students) than that of TC (17 students), however, the number of listening activities that students did in both TB and TC was nearly the same, 371 activities versus 360 activities.

Table 5.6. Listening records from treatment group C (TC)

Number	Names	Listening Units	Listening Activities
1.	Akari	10	40
2.	Takaya	10	40
3.	Ryuya	10	40
4.	Saya	10	40
5.	Ryo	10	40
6.	Koike	10	40
7.	Maiko	10	40
8.	Kanu	10	10
9.	Naorin	10	10
10.	Takahiro	8	32
11.	Miyuki	4	16
12.	Karen	4	4
13.	Jiron	3	3
14.	Ryosuke	2	2
15.	Reiji	1	1
16.	Daiki	1	1
17.	Kisara	1	1
TOTAL			360

Similarly, as Table 5.7 shows listening records from the last treatment group TD. Students in TD were also encouraged to do all listening activities following each unit from the beginning of the semester and received the reminders about it through LINE. As we can see, there were 25 students out of 30 students did the optional listening exercises outside of class. The number

of students who listened all 10 listening units as suggested was the highest among all groups, with 17 students. Moreover, among these 17 students, there were 14 students who listened to all ten units and did all the listening activities following, making up 560 activities. The listening units and listening activities that the remaining eight students listened to were varied. There was one student who listened to eight units with 32 activities, one more student who listened to seven units with 28 activities, another who listened six units with 24 activities, and one student who listened to three units with 12 activities. There were two students who listened to four units with only multiple-choice exercises, accounting for 16 activities. There was one student who listened to two units and only one student who listened to one unit. In comparison of the number of students engaged into the listening activities and the number of activities done between TC and TD, TD had more students engaged into the listening tasks outside of class than that of TC, with 25 students versus 17 students. In term of the number of listening activities done, TD had the highest number of activities done among all groups, with 703 activities.

Table 5.7. Listening records from treatment group D (TD)

Number	Names	Listening Units	Listening Activities
1.	Kurumi	10	40
2.	Asuka	10	40
3.	Yuri	10	40
4.	Yuina	10	40
5.	Tomohiro	10	40
6.	Masato	10	40
7.	Moe	10	40
8.	Mio	10	40
9.	Mami	10	40

10.	Nodoka	10	40
11.	Mone	10	40
12.	Yuya	10	40
13.	Ota	10	40
14.	Yuka	10	40
15.	Airi	10	10
16.	Naoko	10	10
17.	Manami	10	10
18.	Irori	8	32
19.	Daiki	7	28
20.	Nozomi	6	24
21.	Yurino	4	4
22.	Ryosuke	4	4
23.	Shota	3	12
24.	Yuki	2	8
25.	Miyuki	1	1
TOTAL			703

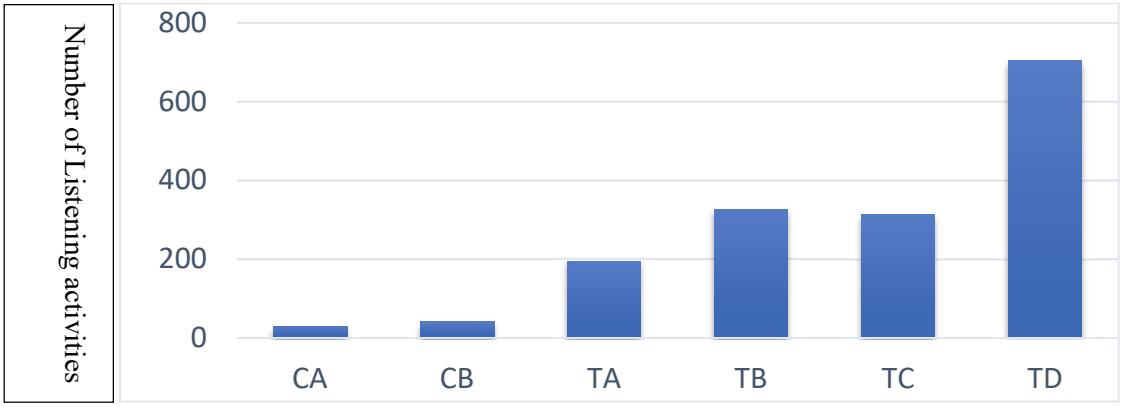


Figure 5.8. Total number of Listening activities

As Figure 5.8 shows how many listening activities students did outside of class time during the semester. In the first semester of 2016, two proxy control groups CA and CB only had 25 activities and 37 activities accordingly. This low number of activities done could be explained that this activity was totally voluntary, and students did not receive any push and reminders about doing the activities from the teacher. The teacher introduced the listening website esl-lab.com and asked students to raise their hands to show what they did in the next class. In the second semester of 2016 and the first semester of 2017, four treatment groups were trained with LINE and reported their listening activities through LINE. We can see the huge difference in comparison of engagement between two proxy control groups and four treatment groups. There was a similar percentage of listening activities done by group TA, TB and TC. Due to the fact that TA had less students (n=17) than that of TB and TC (n=31), it is understandable that the number of listening activities done (195) was less than that of the other groups, with 326 activities and 313 activities respectively. However, TD was an exception in doing the listening activities. This result could be explained that TD used LINE group as their shared studying environment within this class and other classes, they might feel the sense of belonging of a certain community that pushed them to study in order to be equal with other students in class.

5.5 Social Interaction (class)

In comparison of the social interaction between of the two proxy control groups and four treatment groups, we can see the enormous difference in Table 5.8. In the first semester of 2016, email was used as social interaction between the teacher and the students, but it didn't gain much success due to the lack of the common community for the whole class. Therefore, there were only 5 emails in total for the two proxy-control group CA and CB. In the second semester of 2016 and the first semester of 2017, LINE was conducted as social discussion platform for the whole class outside of class time. The total interaction between the teacher and the students in four treatment groups TA, TB, TC and TD increased significantly, accounting for 987

meaning units, 1,364 meaning units, 1,175 meaning units and 2,026 meaning units respectively. Having said this to see that students in treatment groups engaged much more in the tasks compared to that of proxy control groups. In the first semester of 2016, students could ask any questions about Quizlet activities or technical problems during class time or sending emails, but none of the students did so. There were 70 times for both CA and CB for class-related matters and only 3 times for non class-related issues. This could be explained for the limited class time or the shyness of Japanese students in general.

However, through LINE, students-teacher conversation received a huge number of meaning units from messages. Particularly, in terms of class-related matters, there were 858 meaning units in TA, 1,236 meaning units in TB, 1,012 meaning units in TC and 1,604 meaning units in TD. TA had the lowest number of meaning units because of the fact that there were only 17 students in this class. TD witnessed the highest number of meaning units because the fact that there were two hard-working students who would like to study abroad; therefore, they would like to ask for advice from the teacher about study strategies and what kind of textbooks they should follow as well as asking the teacher to help them for interview questions and so on. Moreover, the number of messages' meaning units in LINE interaction within class group was variable, namely 92 in TA, 96 in TB, 135 in TC and 248 in TD. Students in TD were an exception because they used this class LINE group as a common share platform for other classes as well, hence they sent more messages to each other to remind other students about other subjects' deadlines or some materials that they missed during those classes. The use of LINE class group in TD had good sides and bad sides at the same time so there will be more discussion about this matter in the later parts.

In terms of non class-related matter, LINE was using to share some other information related to social life between the teacher and the students. Considering the teacher is a foreigner, so the students would like to introduce many things about Japan, for example, food, culture, events,

festivals to the teacher. The number of messages was variable, which TD reached the highest number of messages' meaning units (56), other treatment groups had a lower number of meaning units, namely TA (27), TB (22) and TC (11); however, this was considered as encouraging for the teacher since the teacher could build a closer relationship with the students through this social tool. It is possible, however, that some people could perceive this interaction as a burden for teachers because teachers had to regulate class outside of the class time as well, therefore some suggestions and solutions for this worry will be discussed in the later parts.

Table 5.8 Social interaction (class)

	CA		CB		TA		TB		TC		TD	
Class-related	Email	3	Email	2	Email	0	Email	1	Email	1	Email	0
	In class	29	In class	41	In class	3	In class	5	In class	4	In class	8
					LINE (Class)	92	LINE (Class)	96	LINE (Class)	135	LINE (Class)	248
					LINE (1-1)	858	LINE (1-1)	1,236	LINE (1-1)	1,012	LINE (1-1)	1,604
Non class-related	Email	0	Email	0	Email	0	Email	0	Email	0	Email	0
	In class	2	In class	1	In class	4	In class	1	In class	7	In class	15
					LINE (Class)	3	LINE (Class)	3	LINE (Class)	5	LINE (Class)	95
					LINE (1-1)	27	LINE (1-1)	22	LINE (1-1)	11	LINE (1-1)	56
	TOTAL	34	TOTAL	44	TOTAL	987	TOTAL	1,364	TOTAL	1,175	TOTAL	2,026

Regarding the nature of LINE interaction within class as can be shown in Table 5.9, we can see the majority of interactions were from teacher to students in TA, TB and TC. The teacher was

the one who often started the conversation first, then sent materials, made announcements and reminders to class; therefore, the teacher sent 77 meaning units in TA, 69 meaning units in TB and 114 meaning units in TC. The number of meaning units from students' message who responded to the teacher within class group was less than that of the teacher, at nine units, 30 units and 26 units respectively. The students played a receiver role during these class conversations. They received announcements, reminders, explanations and/or requests for information from the teacher. A few students also reported Quizlet test score (seven times in three groups TA, TB and TC) and the listening activities they did (six times in groups TB and TC). They also shared 6 links of Quizlet folders to the class as well. Moreover, in LINE, the "seen" function played a crucial role to serve as a means of recognizing that they had received and read the postings from the teacher. However, TD was an exception as mentioned before that this group used this LINE class as a common share platform for other classes as well. They sent announcements, reminders and requests for information for this class and other classes. Therefore, TD was the only group that the meaning units from students' messages were nearly double than that of the teacher, making up 224 meaning units. Because of this active engagement in class, students in TD seemed to be keen on sending through LINE class. In particular, they sent 8 Quizlet test scores and 44 listening activities, making up the highest number out of four treatment groups. Another interesting feature in LINE was stickers, where sometimes students and the teacher used stickers along with greetings or acknowledgements. Stickers in this research were regarded as making the interactions more friendly and smoother, however, it could also be understood as a way of avoiding unnatural or silent moments during the communications when both sides have nothing more to say. Students in TD again used stickers the most with 63 times. TA, TB and TC used stickers much less than that of TD, at 4 times, 7 times and 12 times respectively. As you can see from Figure 5.9, Figure 5.10 and Figure 5.11, LINE interaction between the teacher and students were friendlier with the assistance of

stickers, making a non-threatening studying environment for low proficiency students. In Figure 5.9, the teacher greeted students and make an announcement for vocabulary unit 11 and requested students to study. She made the announcement and the request less imposing by adding a sticker. Students acknowledged that they received the teacher's post by replying with acknowledging stickers. In Figure 5.10, the teacher made a reminder about the test and make another announcement and request to the class, students could ask questions and reply by sending acknowledging stickers along with thank-you texts as shown in Figure 5.11.

Table 5.9 LINE interaction (class)

	CA		CB		TA		TB		TC		TD	
	T	S	T	S	T	S	T	S	T	S	T	S
Greeting					9	1	13	1	18	2	15	26
Announcement	-	-	-	-	10	-	7	-	8	-	9	11
Reminder	-	-	-	-	6	-	4	-	7	-	5	11
Explanation/ Advice	-	-	-	-	4	-	8	-	2	-	3	5
Encouragement					1	-	-	-	2	-	7	-
Apology					1	1	1	-	2	-	3	3
Request for information	-	-	-	-	12	3	3	1	2	-	3	6
Acknowledgement	-	-	-	-	3	9	8	12	3	4	10	35
Narrative	-	-	-	-	12	-	4	-	5	-	6	12
Sticker	-	-	-	-	2	2	5	7	13	12	6	63
Quizlet test picture	-	-	-	-	-	1	-	2	-	4	-	8
Audio files	-	-	-	-	8	-	8	-	26	-	26	-
Link shared	-	-	-	-	5	1	4	5	6	-	6	-
Handouts	-	-	-	-	4	-	4	-	20	-	20	-
Listening Activities pictures	-	-	-	-	-	-	-	2	-	4	-	44
TOTAL	0	0	0	0	77	18	69	30	114	26	119	224

*T: Teacher

*S: Student

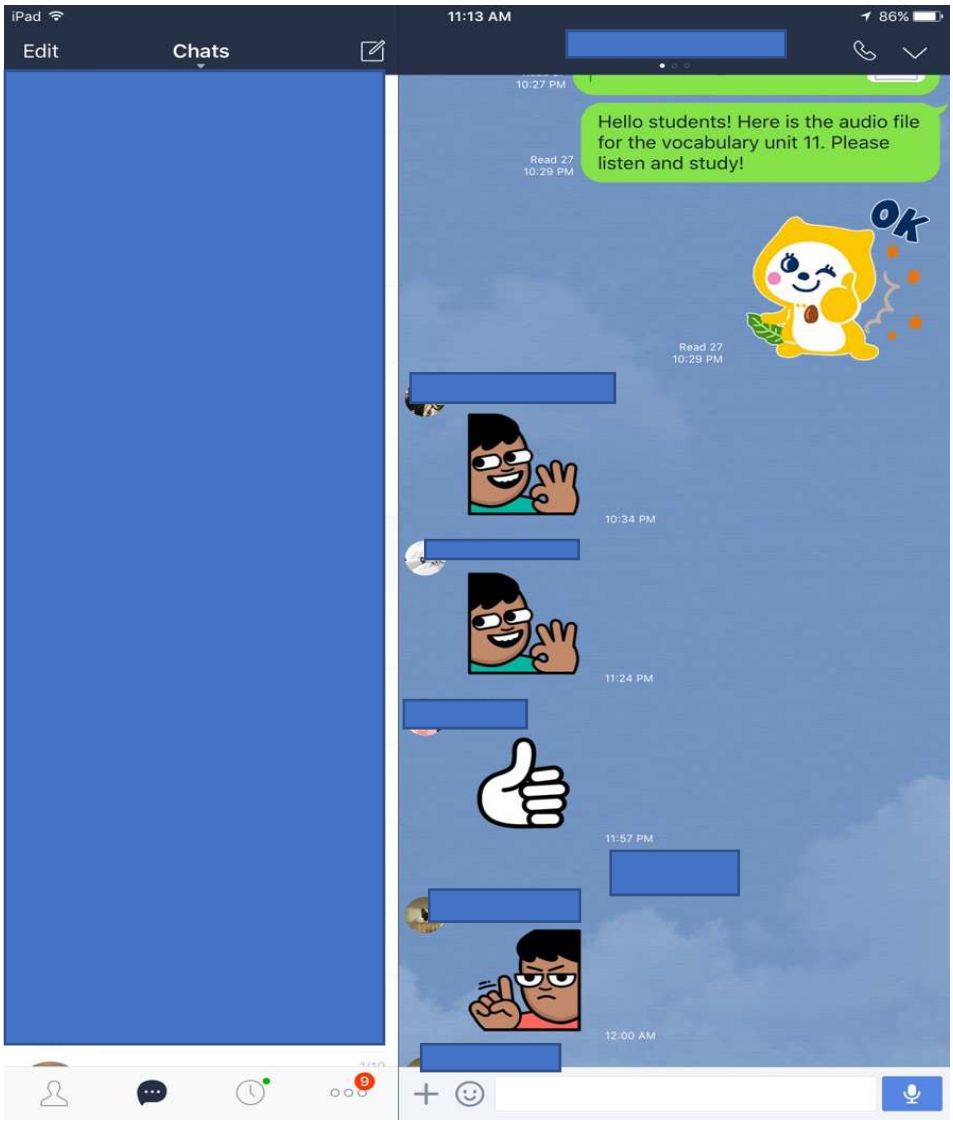


Figure 5.9. Sample of LINE interaction (class)

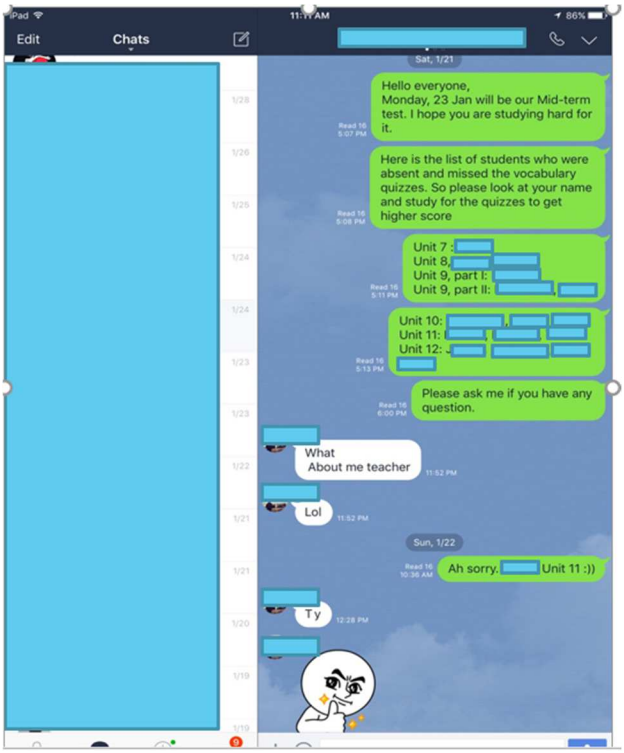


Figure 5.10. Sample of LINE interaction (class)

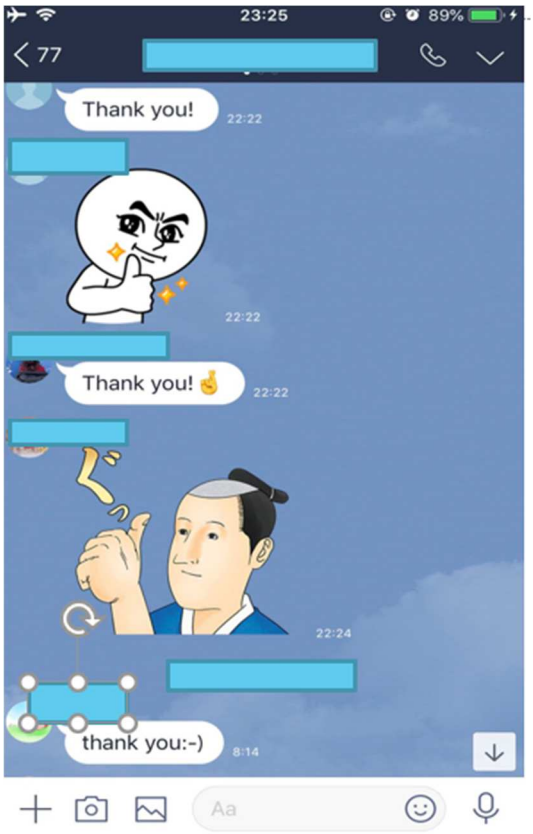


Figure 5.11. Sample of LINE interaction (class)

5.6 Social Interaction (individual)

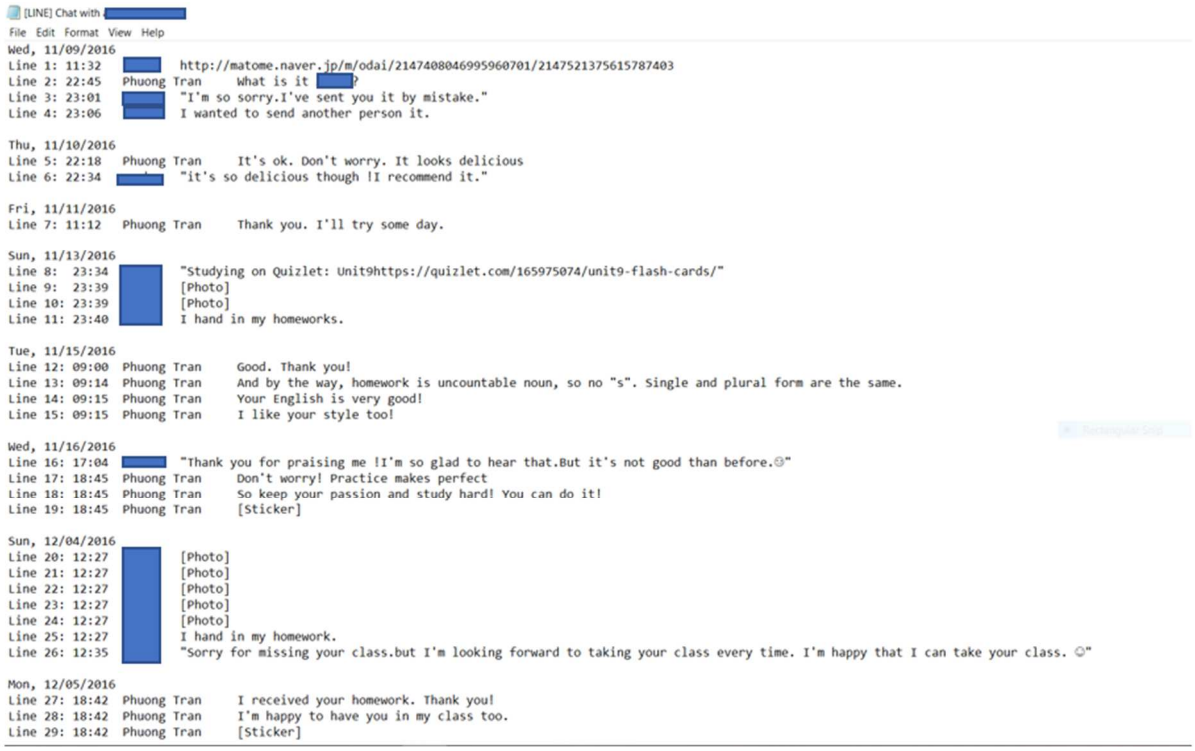
In comparison of the nature of interactions in LINE group and LINE individual, Table 5.10 shows LINE individual interaction between the teacher and students. Unlike LINE group, the majority of interactions in LINE individual chat were from students to the teacher. In total, students in TA, TB, TC and TD sent 470 meaning units, 714 meaning units, 592 meaning units and 1064 meaning units respectively. In LINE individual interactions, students were the one who started the conversation first by greeting, and of course the teacher greeted back. Therefore, the number of greeting meaning units were similar between the teacher and students. In particular, there were the same number of greetings in TA by both teacher and students with 69 greetings. The other treatment groups were as follows: 89 versus 85 greetings in TB, 65 versus 63 greetings in TC and 92 versus 87 greetings in TD. Following greeting, students often started with submitting Quizlet activities and the listening activities. Even students in all treatment groups did more Quizlet activities than the listening activities, however, the teacher could track the Quizlet activities through teacher's site, students ended up sending only the Quizlet test score, with 36 units in TA, 52 units in TB, 73 units in TC and 157 units in TD. However, students in TA and TB shared their Quizlet folders (named link shared) through LINE individual chat as well, with 54 times and 72 times respectively.

Moreover, the listening activities were reported the most through LINE individual chat with all treatment groups TA, TB, TC and TD, with 208 units, 373 units, 360 units and 659 units respectively. Students in TD did the listening activities the most among treatment groups. This could be explained that their classroom was computer classroom, which was convenient for them to do all the exercises following the listening units such as mixed-up sentence, sentence and vocabulary matching and text completion quiz. After receiving students' tasks, the teacher would acknowledge that she received the exercises. That is the reason why acknowledging meaning units from the teacher were much more than that of students, with 79 versus 27 units

in TA, 89 versus 34 units in TB, 85 versus 32 in TC and 93 versus 41 in TD. In addition, based on the score or contents of the exercises, the teacher would give encouragement to students, with 435 times in total for all treatment groups. Besides giving encouragement, the teacher also gave advice or explanation to students regarding of their study strategies or fixing their mistakes in Quizlet folders, with 213 times in total for all treatment groups. The teacher in this study used stickers with a high frequency, just after encouragement and acknowledgement, with 335 stickers in total for all treatment groups. Stickers used with different functions will be discussed in more details later.

Table 5.10. LINE interaction (individual)

	CA		CB		TA		TB		TC		TD	
	T	St	T	St	T	St	T	St	T	St	T	St
Greeting	-	-	-	-	69	69	89	85	65	63	92	87
Announcement	-	-	-	-	-	-	-	-	-	-	-	-
Reminder	-	-	-	-	29	-	71	-	41	-	52	-
Explanation/ Advice	-	-	-	-	35	-	62	-	33	-	83	-
Encouragement	-	-	-	-	96	-	102	-	105	-	132	-
Apology					-	3	-	2	-	3	-	4
Request for information	-	-	-	-	19	3	22	2	10	4	15	12
Acknowledgement	-	-	-	-	79	27	89	34	85	32	93	41
Narrative	-	-	-	-	21	38	37	45	23	22	41	47
Sticker	-	-	-	-	67	32	72	49	69	35	92	57
Quizlet test pictures	-	-	-	-	-	36	-	52	-	73	-	157
Audio files	-	-	-	-	-	-	-	-	-	-	-	-
Link shared	-	-	-	-	-	54	-	72	-	-	-	-
Handouts	-	-	-	-	-	-	-	-	-	-	-	-
Listening Activities pictures	-	-	-	-	-	208	-	373	-	360	-	659
TOTAL	0	0	0	0	415	470	544	714	431	592	600	1064


[LINE] Chat with [redacted]

File Edit Format View Help

Wed, 11/09/2016
Line 1: 11:32 [redacted] http://matome.naver.jp/m/odai/2147408046995960701/2147521375615787403
Line 2: 22:45 Phuong Tran What is it [redacted]?
Line 3: 23:01 [redacted] "I'm so sorry.I've sent you it by mistake."
Line 4: 23:06 [redacted] I wanted to send another person it.

Thu, 11/10/2016
Line 5: 22:18 Phuong Tran It's ok. Don't worry. It looks delicious
Line 6: 22:34 [redacted] "it's so delicious though !I recommend it."

Fri, 11/11/2016
Line 7: 11:12 Phuong Tran Thank you. I'll try some day.

Sun, 11/13/2016
Line 8: 23:34 [redacted] "Studying on Quizlet: Unit9https://quizlet.com/165975074/unit9-flash-cards/"
Line 9: 23:39 [redacted] [Photo]
Line 10: 23:39 [redacted] [Photo]
Line 11: 23:40 [redacted] I hand in my homeworks.

Tue, 11/15/2016
Line 12: 09:00 Phuong Tran Good. Thank you!
Line 13: 09:14 Phuong Tran And by the way, homework is uncountable noun, so no "s". Single and plural form are the same.
Line 14: 09:15 Phuong Tran Your English is very good!
Line 15: 09:15 Phuong Tran I like your style too!

Wed, 11/16/2016
Line 16: 17:04 [redacted] "Thank you for praising me !I'm so glad to hear that.But it's not good than before.☺"
Line 17: 18:45 Phuong Tran Don't worry! Practice makes perfect
Line 18: 18:45 Phuong Tran So keep your passion and study hard! You can do it!
Line 19: 18:45 Phuong Tran [Sticker]

Sun, 12/04/2016
Line 20: 12:27 [redacted] [Photo]
Line 21: 12:27 [redacted] [Photo]
Line 22: 12:27 [redacted] [Photo]
Line 23: 12:27 [redacted] [Photo]
Line 24: 12:27 [redacted] [Photo]
Line 25: 12:27 [redacted] I hand in my homework.
Line 26: 12:35 [redacted] "Sorry for missing your class.but I'm looking forward to taking your class every time. I'm happy that I can take your class. ☺"

Mon, 12/05/2016
Line 27: 18:42 Phuong Tran I received your homework. Thank you!
Line 28: 18:42 Phuong Tran I'm happy to have you in my class too.
Line 29: 18:42 Phuong Tran [Sticker]

Figure 5.12. Sample of LINE individual chat

As Figure 5.12 shows a sample of LINE individual chat between the teacher and a student. In this chat, the teacher and the student had a social interaction about food in Line 1 to Line 7. Moreover, the teacher gave some advice to the student in Line 13 when the students submitted homework. The teacher also praised and encouraged the student in Line 14, Line 17 and Line 18. The student apologized the teacher for missing one class in Line 26, but at the same time, the student gave some consolation to the teacher by saying that she was happy to take the class and looking forward to taking the class every time with a smiling face. In this interaction, we can see that the teacher and the student were developing a good relationship in collaboration of teaching and studying.

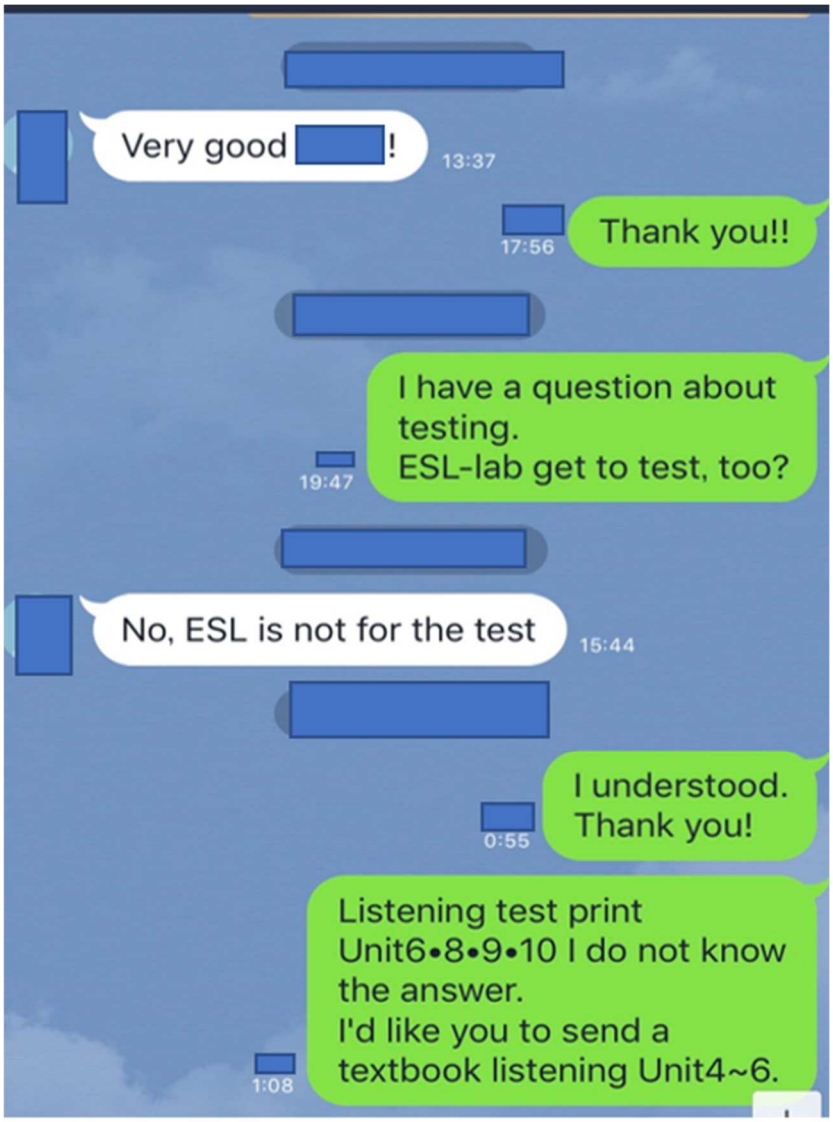


Figure 5.13. Sample of LINE individual chat

As can be seen from Figure 3.15, another sample of LINE individual chat taken from a screen shot between the teacher and a student from the interaction. In this chat, the teacher was the one sending messages on the left-hand side and the messages from the right-hand side were from the student. In this conversation, the student requested for some information about the test from the teacher and expected an explanation or advice from the teacher. We can see the nature of this individual interaction was request from the student to the teacher.

5.7 Records of notes from in-class discussions with students

This session was written from the notes the teacher took in-class discussions with students and through her own observations.

In the first semester of 2016, students in CA had no reaction when the teacher introduced listening website or Quizlet app for the first three weeks. Doing listening exercises on esl-lab.com and Quizlet activities were voluntary outside of class, therefore students did not really pay much attention. From week 4, the teacher spent 10 minutes before the class finished and kept asking students to raise their hands if they did the suggested listening units or Quizlet activities or not, or if they had any question related to these activities. However, normally we had a 10-minute silent moment with students' heads down to their desks or tried not to look at the teacher. From week 5, the teacher did not ask and waited for the "yes" answer any more, she started to check if students downloaded Quizlet app or not. All of the students in this class knew about Quizlet, so they had the Quizlet app in their phones. They started to do Quizlet activities from week 5 to the end of the semester. However, listening activities were difficult to track, the teacher could only trust students if they said they listened this task or that task. From week 5, the teacher asked students to take pictures which listening unit or which activities they listened and showed the teacher in the next class. In addition, when being asked about the listening activities following each unit, students said they did not know that they should do those exercise, they thought it would be enough for them to just do the multiple-choice exercise. There were only17 students in this class, hence it was easier for the teacher to check through every single student in the class just for 10 minutes.

In a similar vein, students in CB also had no reaction when the teacher introduced listening website or Quizlet app for the first three weeks. There were more students in this class, therefore it was more difficult to manage all the work they did outside of class in only 10 minutes during

class time. The teacher had to divide class into two smaller groups with 15 students and 16 students in order to check Quizlet activities and listening activities. From week 4, the teacher announced that students from number 1 to 15 would be checked in week 5 for Quizlet activities and listening activities and students from number 16 to 31 would be checked in week 6 if they did any activity. For Quizlet activities, the teacher could check online students' progress online through teacher's site, however, for listening activities, the teacher had to ask students to show her what they did. Similar with CA, students in CB did not do all the listening activities attached to the units because they thought the activities were not compulsory.

In the second semester 2017, students in Class A were treated as treatment group TA. The teacher created LINE group for TA so that students could contact the teacher more easily. Students seemed to like the idea. They all joined LINE group without hesitation. The teacher had a closer relationship with TA comparing with TB because of the small number of students in class. Students started reported what they had done outside of class through LINE from the second week. Through LINE individual chat, this class had the highest number of messages regarding of non-class related matters. There were two students who often shared their favourite food or restaurants or coffee shops to the teacher. They loved chatting in English with the teacher. They invited the teacher for coffee, but we ended up having no matching time for the whole semester. There was another Chinese student in TA who often had a chat with the teacher after class. He shared his daily life as a foreigner in Japan and he thought the teacher could understand him because the teacher was a foreigner too. The teacher gave him some advice how to study English better, how to make friends in Tokyo as well as how to overcome the loneliness in Tokyo.

Similarly, in the same semester, students in Class B were treated as treatment group TB with 31 students. The teacher also created LINE group so that students could contact the teacher more comfortably. There was some confusing faces and some hesitation from students. It was

observed that students in TB had less connections with each other, so they might not want to be in the same LINE group. Week 2, after the teacher's persuasion that LINE group only served for study purposes for example: submitting Quizlet scores or listening activities, they agreed to join LINE group. But not until week 3, they started reporting what they had done outside of class. Same as TA, the teacher reminded students in TB to do all the listening activities through computers, but students did not seem to like doing the activities with computers. This class, they preferred to do only multiple-choice exercises with smart phones. Of course, the teacher couldn't force them to do so, but she did give advice that it would be better for them to do other listening activities as well. She showed on the big screen how to do those activities in some classes.

In the first semester of 2017, there were 31 students in treatment group TC. The fact that they had the lowest English level, level 2 out of 9 levels according to school system's placement test. The teacher created LINE group from the first class and 25 students joined. The rest six students joined after that when the teacher asked students in LINE group if they knew these six students' LINE account to invite them to our group. This LINE group was not so active. Most of the messages were from the teacher. Students did not ask any question in class about how to do Quizlet and listening. The teacher showed students how to do Quizlet and listening in class and through LINE as well. During the first 5 weeks, the engagement in doing Quizlet was not so high, therefore during class time, the teacher showed Quizlet teacher's site to students about tracking students' activities. The engagement in doing Quizlet was higher from week 6.

In the same semester, treatment group TD was an exception. There was one student who always reported her work through LINE group. From the first week, she asked the teacher if she could send her work in LINE group or not. The teacher gave options that she could send to LINE group or individual chat with the teacher, but she still chose to send to LINE group. Some other students asked the teacher in the next class if they could send to individual chat or they had to

send to LINE group. Therefore, the teacher made an announcement in LINE group that students could submit their work either in LINE group or individual chat as long as which one they felt comfortable to send to. This class had more active discussion during class time about Quizlet matching game. They also mentioned about Learn function in Quizlet that was difficult to get the desired score. Students in this class seemed to be close to each other. They discussed about one student's singing video in LINE group in the next class and asked the teacher how she liked about his voice. The teacher had a closer relationship with students in TD than that of TC.

5.8 Post-treatment surveys

In an effort to figure out whether engagement in Quizlet activities could be enhanced by providing the training in class or by LINE interactions outside of class, post surveys were carried out as can be seen in Table 5.11. Even in the pre-survey, the percentage of students intended to use Quizlet was 88.2% and 83.9% in proxy control group CA and CB, just 52.9% and 41.9% did respectively. However, in the second semester, when the same students were treated as treatment groups through LINE interactions and support outside of class, the percentage of students actually used Quizlet increased dramatically, accounting for 88.2% (TA) and 87.1% (TB).

With the success from treatment groups TA and TB, treatment groups TC and TD were applied to use Quizlet from beginning of the first semester in the second year 2017. Even the percentage of students in TC and TD intended to use Quizlet in the pre-survey was quite high 74.1% and 76.7% respectively, the number of real usages was even higher, with 80.6% and 90% accordingly. The great usage of Quizlet could be explained through motivation through LINE interaction. All treatment groups were motivated by LINE interactions, with 70.6%, 74.2%, 77.4% and 86.7%. Also, students in treatment groups TA, TB, TC and TD recognized the usefulness of using Quizlet app for studying vocabulary. The percentage of perception of

usefulness in TA was 40%, making up the lowest number out of the four treatment groups while those of the other treatment groups were 44.4%, 48% and 48.1% respectively. This is an interesting figure that more than half of the students acknowledged that they did Quizlet activities because of being requested by the teacher, making up 55.6% (TB), 52% (TC) and 51.9% (TD). The percentage of the students in TA perceived to do Quizlet activities as being requested was quite high (60%); however, there was a slight decrease in this perception comparing to that of CA (77.8%).

When being asked if students needed more training how to do Quizlet activities, four groups including two proxy control groups (CA and CB) and two treatment groups (TC and TD) had a similar percentage with a-yes answer making up just over 25%. However, surprisingly, students in TA and TB needed more training in the second semester, 41.2% and 38.7% respectively, which could be explained that they might know what they did not know in the first semester. Also, the training only happened during the limited class time in the first semester. In the second semester in 2016 and the first semester in 2017, the training was conducted throughout the semester through LINE.

Similarly, in terms of engagement in doing listening activities as Table 5.11 shows, even in the pre-treatment survey, the percentage of students CA and CB planned to do the listening activities was quite high with 82.4% and 80.6% respectively. However, in the post-treatment survey, this percentage was much lower, with 47.1% and 55.5% accordingly. In fact, there were 12 students in CB reported during in-class discussion that they did the listening activities, however, in the post-survey, there were 17 students said they did the listening activities, making up 54.8%. This could be explained that students might do Listening outside of class, but they forgot to report to the teacher during class time due to limited class hours. In addition, when the same students in Class A and Class B treated as treatment groups TA and TB trained through LINE and reported their work through LINE, the percentage of students who did the listening

activities increased remarkably, with 88.2% for TA and 87.1% for TB. This figure was even higher than that of their intention in the first semester of 2016. The percentage of students who did Listening in treatment groups TC and TD was varied, with 54.8% and 83.3% respectively. Also, the percentage of students in treatment groups realized the usefulness of doing the listening activities was similar as that of doing Quizlet activities, with 46.7% for TA, 40.7% for TB, 41.2% for TC and 48% for TD. Furthermore, the same percentage of the students in CA and CB did Listening as being requested was 75%. Interestingly, there were also more than half of students in four treatment groups thought that they did the listening activities because of the teacher's request.

In the first semester of 2016, students in CA and CB didn't send any questions by email or asking about Quizlet usage or the listening activities neither in class or by email so they couldn't get feedback from the teacher; however; in the second semester of 2016, after forming LINE group for discussion, students could send their Quizlet set by LINE anytime when they completed the tasks and got feedback from the teacher after that so it was likely they were motivated to finish the Quizlet set as well. Therefore, the percentage of the students thought that the feedback from the teacher was helpful for language learning dramatically high among treatment groups with TA (64.7%), TB (61.3%), TC (77.4%) and TD (83.3%).

One of the functions the instructor used often in LINE was to send reminders or announcement to students, hence students got reminders about some deadlines of assignments, Quizlet set completion, listening activity completion or other issues associated with class. Therefore, when being asked if they wanted to get reminders through LINE, students in all treatment groups TA, TB, TC and TD gave a positive answer with 58.9%, 58.1%, 45.2% and 66.7% accordingly.

Table 5.11. Post surveys

	CA (17)	CB (31)	TA (17)	TB (31)	TC (31)	TD (30)
Used Quizlet	Yes: 52.9% (9 St)	Yes: 41.9% (13 St)	Yes: 88.2% (15 St)	Yes: 87.1% (27 St)	Yes: 80.6% (25 St)	Yes: 90% (27 St)
- Reason to use Quizlet	Useful: 22.2% (2/9 St) Requested: 77.8%	Useful: 23.1% (3/13 St) Requested: 76.9%	Useful: 40.0% (6/15 St) Requested: 60.0%	Useful: 44.4% (12/27 St) Requested: 55.6%	Useful: 48.0% (12/25 St) Requested: 52.0%	Useful: 48.1% (13/27 St) Requested: 51.9%
- Need more training	Yes: 29.4% (5 St)	Yes: 29.0% (9 St)	Yes: 41.2% (7 St)	Yes: 38.7% (12 St)	Yes: 25.8% (8 St)	Yes: 26.7% (8 St)
Did Listening	Yes: 47.1% (8 St)	Yes: 54.8% (12 St → 38.7%)	Yes: 88.2% (15 St)	Yes: 87.1% (27 St)	Yes: 54.8% (17 St)	Yes: 83.3% (25 St)
- Reason to do Listening	Useful: 25.0% (2/8 St) Requested: 75.0%	Useful: 25.0% (3/12 St) Requested: 75.0%	Useful: 46.7% (7/15 St) Requested: 53.3%	Useful: 40.7% (11/27 St) Requested: 59.3%	Useful: 41.2% (7/17 St) Requested: 58.8%	Useful: 48.0% (12/25 St) Requested: 52.0%
- Need more training	Yes: 23.5% (4 St)	Yes: 25.8% (8 St)	Yes: 35.3% (6 St)	Yes: 38.7% (12 St)	Yes: 35.5% (11 St)	Yes: 26.7% (8 St)
Motivated by interaction	Yes: 17.6% (Email) (3 St)	Yes: 12.9% (Email) (4 St)	Yes: 70.6% (LINE) (12 St)	Yes: 74.2% (LINE) (23 St)	Yes: 77.4% (LINE) (24 St)	Yes: 86.7% (LINE) (26 St)
Feedback helpful for LL	Yes: 5.8% (Email) (1 St)	Yes: 3.2% (Email) (1 St)	Yes: 64.7% (LINE) (11 St)	Yes: 61.3% (LINE) (19 St)	Yes: 77.4% (LINE) (24 St)	Yes: 83.3% (LINE) (25 St)
Want reminders	Yes: 11.8% (Email) (2 St)	Yes: 9.7% (Email) (3 St)	Yes: 58.9% (LINE) (10 St)	Yes: 58.1% (LINE) (18 St)	Yes: 45.2% (LINE) (14 St)	Yes: 66.7% (LINE) (20 St)

5.9 Interviews

Interviews were conducted within focus groups at the end of each semester. The purpose of interviews is to have in-dept thoughts from students. The researcher would like to know more about not only if students did the activities but how students engaged in them as well as to know students' views of how to improve practice for future students, therefore participants were encouraged to say what they think is good or bad without hesitation. The data from the whole interviews are huge, therefore some significant extracts are analysed in this chapter, the other parts will be discussed in the later chapter.

a. Learning motivation

In the interviews, the researcher mentioned that students in Japan are normally forced to learn English, but she wanted to know how students think of learning, and how they engage in activities. Most Japanese students want to learn how to speak English, but they don't want to study it. The researcher would like to know what motivation students have for learning and how they can improve their motivation as well as to know what students need to be able to get more involved in their English studies. The responses were varied as followings:

Student A: Overseas trip!

Student B: Really, I don't know what I need.

Student C: I'd like to be able to watch movies.

Student D: I want to listen to English songs

Students: Yes, yes and [laughter]

In fact, students' responses are understandable when they said they didn't know what they need because students are kind of studying without any purpose. They don't have any concrete goals of what they want to achieve. Also, most students are just used to doing what the teacher asks

them, and they often do that without question. The researcher explained more that in high school, most students are thinking about getting into university, and English for entrance exams isn't interesting or very useful. But when students come into university, they need to take responsibility for their own study. Just following the teacher will result in some degree of acquisition, but it is very difficult to sustain. Moreover, during holiday times, most students just abandon their English studies completely. The explanation received many consents from the students.

In response to student A when she said her motivation to study English was overseas trip, the researcher replied that an overseas trip would be great, but it's not so practical because there are cases of students that go on study abroad, but they come back to Japan without having learned much English at all. The reason is that even though they go overseas, they still surround themselves with Japanese speakers.

In order to make the talk about improving students' motivation in more details, the researcher asked students about what they would like to learn and what they need to do to study more effectively as can be shown in the extract below:

> ***Researcher****: Time in class is important and homework is important, but just these two is not enough to improve. Language study just ends up being something that students do when they are encouraged to do so, and they stop during holidays. So, I'd like to also know what we can do to help you to have motivation to study during holiday times too.*
>
> ***Student A****: I'd like to look at anime through my mobile phone with subtitles.*
>
> ***Students****: Yes, yes.*
>
> ***Researcher****: Yes, I see. I think these are great methods. The only problem is that movies and anime at normal speed are often too difficult to follow. Another problem is*

that if you have English audio with Japanese subtitles, over time you stop listening to the English and just concentrate on the subtitles.

***Student B**: Yes, that means we end up just reading [unclear] in Japanese.*

***Researcher**: It's also ideal to try to not rely on the Japanese but try to function only in English. Another problem with movies is that they are very long, so it's difficult to know when to start and stop. Shorter lengths of up to 3 to 5 minutes or so would be the most appropriate.*

***Student C**: Yes, if it's too long then I wouldn't bother.*

***Researcher**: It's also good if you can adjust the play speed.*

***Student A**: Adjust the play speed?*

***Researcher**: Yes, with some apps you can change the speed.*

***Student B**: What about songs?*

***Researcher**: Yes, songs are really good too because once they get in your head, you find yourself singing them over and over.*

It is likely that students in this study don't know about learning strategies and their motivation about learning English seemed vague. They talked about their habits of studying, which might not lead to the desired outcomes.

b. Technical difficulties in actual usage of Quizlet and Listening

In order to trigger students to discuss some technical problems in using Quizlet and Listening, the researcher explained the importance of input time is that the amount of time put in to study might not ultimately be reflected in the outcomes. In other words, it's not how much time students spend but what they do with the time that they spend on studying. Most Japanese

students say that they want to be able to speak English, but the time that they spend on studying doesn't include any time on speaking itself, mostly because they don't know what to do to actually improve their speaking. There's a need to think about what skills they would like to improve and then spend time on actually improving that skill. When being asked if students had experienced any difficulties in carrying out the activities that they were suggested, the responses were as followings:

> ***Student A****: Yes, my battery on my phone kept running out.*
>
> ***Researcher****: That's an important point.*
>
> ***Student B****: I find that I'm using up my allocated data too quickly.*
>
> ***Student C****: Yes, I'd like to have activities that I can download and then do offline rather than accessing the Internet all the time. I've already run out of my data!*
>
> ***Student D****: Yes, yes. I'd be happier to do them if I didn't need to use my data.*
>
> ***Researcher****: Quizlet and the listening activities actually aren't all that heavy on data, but the point about using up the battery is very true.*
>
> ***Student B****: My phone is fine with the battery.*
>
> ***Student A****: My phone is old, so it keeps running out of battery!*

As the extract shows one big problem for students when doing Quizlet and the listening activities is that students were worried about their batteries and data usage. They would be happy to do more activities if they could do offline or the activities wouldn't take too much batteries.

Moreover, in an attempt to figure out any difficulties in doing Quizlet and Listening, the researcher asked students if there was anything that they couldn't understand when actually doing the activities, the extract shows their responses:

***Student B**: Do you know the part where you need to make your own lists?*

***Student A**: Ah, yes!*

***Student B**: When you input the information for the vocabulary, if you have a mistake then it won't let you continue.*

***Student A**: Yes, even if you have just one mistake, it won't let you move forward.*

***Student B**: When you look at it, it's correct, but because of a character mistake, you can't go forward.*

***Student D**: Yes! When you look at it, it's correct, but because you used hiragana instead of kanji then it says it's wrong even though it's right.*

***Students**: Yes, yes!*

***Student B**: Yes, that's really a pain.*

***Researcher**: If you make their own lists, then you can remember what you used, but if you use lists made by someone else, then it's hard to know what the answer is, and you'll get frustrated. Do you know that you can talk to other students and share, copy and edit sets from your friends?*

***Students:** [Indistinct] Really?*

***Student A:** I don't use the computer very much, so I want to do things only on my smart phone.*

Researcher: *But we can do it with your phone too. So you don't use the computer for other subjects?*

Student A: *Not really. Just at the end of the semester for reports, and only for two subjects.*

Researcher: *So you don't use the computer to access text materials for other subjects.*

Student A: *No, they all use paper-based textbooks.*

Researcher: *What about the listening?*

Student D: *The listening is difficult. I can't understand what they're saying.*

Researcher: *That's the normal speed. That's why there's a script there to help you. If you get used to slow listening, then it becomes difficult to listen to normal speed.*

Students: *[Indistinct] Yes.*

As we can see, students had trouble in making their own Quizlet sets with the input of Japanese higarana, katakana or kanji characters. If they made the sets with some wrong characters, they would have trouble in doing the activities later even they knew what they were doing was right. Therefore, they had to fix the sets or remember the way they input before they continued doing the activities. That is the reason why some students preferred to make their own lists, rather than copied from their classmates' lists. In terms of the listening activities, students thought Listening was difficult because it was fast, they couldn't follow.

c. Preference for LINE group and LINE individual

In terms of students' preference for LINE group and LINE individual, the researcher asked students about how they felt about using these two different types of LINE discussion. The extract below shows their responses.

Student D: *If I have a question, I want to ask the teacher directly. I don't want the whole class to see what I write.*

Researcher: *Yes, I see. Do you think this is something you could get used to, or do you think that you just don't want to send to the class group?*

Student A: *I think it would be ok if we get used to it. At the beginning of the semester we don't know the class members very well either, so it feels uncomfortable to send something that everyone can see.*

Researcher: *Yes, that's understandable.*

Student D: *The other thing is that I found it annoying getting notifications when people wrote to the teacher when it is something not related to me at all. With so many students, it's a lot of messages when students send their Quizlet scores.*

Researcher: *Yes, I understand that too, so I would have preferred students to send privately, but some students sent to the class, so everyone followed that. In some ways it's easier to check to see who submitted what when it's individual.*

Student A: *Things like the listening and information about the class would be helpful to have to the group.*

Student D: *Yes, that would be better to the group.*

Researcher: *So you'd prefer messages from the teacher to the class, but not messages from other students.*

Students: *[Indistinct] Yes, yes.*

Researcher: *Do you see any function for the group chat for messages sent by students?*

Student C: *Hmm, that's difficult. We don't really have any need to share anything with other students. If we have questions, then the individual LINE is enough for us.*

Researcher: *Do you have any other teachers that you keep in close contact with through tools like LINE?*

Students: *No, no.*

Researcher: *Do you feel it's good to be able to communicate with the teacher like this?*

Students: *[Indistinct] Yes it's good. Yes.*

Student D: *With other teachers, we have to either come to class and ask the teacher, or we have to send email messages. With LINE, we feel like you are close to us and can respond quickly when we need help.*

Researcher: *So you find it convenient. Any other questions or anything that could be improved? I want to keep a close relationship with students if possible, and maybe students might find it hard to say something verbally, but with LINE I feel students can take time to write messages.*

Students: *Yes, that's true.*

Researcher: *Do you feel that using LINE helped to give you motivation to study English.*

Student C: *If we get close to the teacher, then we do feel more motivated.*

Researcher: *Do you have anything else you'd like to add?*

Students: *No. That's fine.*

Researcher: *Thank you for your time! I'll try to make it better for you for next semester. Please let me know if you have any type of apps you like too. I use Quizlet for learning Japanese.*

Students: *[Laughter] Thank you!*

As we can see from the extract, students had different ideas about how to use LINE group and LINE individual, they preferred LINE group was for the teacher to the whole class, rather than for other students to submit their homework. Some other students were embarrassed to send something to the teacher and the whole class knew about it when they just started class together and they didn't really know each other yet. In terms of LINE individual chat with the teacher, students thought it was a good idea that they could contact the teacher in an easy and comfortable way, which could build a good relationship and motivate them to study more.

d. Suggestions for future usage

With students' real experiences, the researcher would like to hear their suggestions for future use in order to make the learning more fruitful. The extract shows their suggestions as followings:

Researcher: *This was mentioned on the survey, but what did you think of the online materials for the class.*

Student B: *There are a lot of messages, that it's hard to sort through them all to find the materials. I'd prefer to have them on paper.*

Researcher: *I put them online because students often forget the paper-based materials, so when they're online you can access them at any time from anywhere.*

Students: *Ohhh.*

Student C: *I never realized we could see them.*

Researcher: *Do you have any requests with regards to using Quizlet?*

Student D: *Yes, I'd like to make my list not be visible to other students.*

Researcher: *That can be done on the computer.*

Student C: *Ahhh, on the computer… I want to do it on the mobile app.*

Researcher: *Wait, you can do it on the phone too. Here it is, you click on this, click edit, and then select "Visible to everyone" or "Just me."*

Student C: *Ahhhh, really! You can do it!*

Researcher: *How would you feel about having a manual to use from the beginning of the semester?*

Student C: *Yes, that would be great. We don't know what functions that there are.*

As can be seen from what students said, they thought it took time to sort out all the messages to find the materials that the teachers sent. This could be explained that students in TD sent too many messages about non-related classes, which made other students in class distracted. Also, they didn't save the materials the teacher sent to their LINE account, therefore after a period of time, the materials got expired and they couldn't open again. Another suggestion was that they didn't want their Quizlet set visible to everyone. They thought a manual how to use Quizlet from the beginning of the semester would be helpful for them as well.

5.10 Quiz scores

As Table 5. 12 displays the Quiz scores through the three semesters. From the beginning of the study, Quiz scores were just an indication. The study would like to investigate students' engagement into the tasks, rather than to test students' proficiency or ability of learning English. Students were assigned to accomplish six Quizzes through each semester. In the first semester

of 2016, two proxy control groups CA and CB witnessed a slight rise in the score from Quiz 1 to Quiz 6; however, Quiz 4 was just 66.5% and 65.7 % respectively, making up the lowest score in the semester due to the fact that it was the week after Mid-term test and students' studying mood was likely to go down. Also, SD in CA and CD was quite high, ranging from 18.1% to 27.4% and 17.3% to 28.5% accordingly, which means the gap among students with high scores and low scores was large. In the second semester of 2016, there was a great change among class TA and TB's Mean. Mean increased considerably among students, above 80 %, except for Quiz 4 with the same pattern as groups CA and CB. TA's Mean in Quiz 4 was 79.2%, accounting for the lowest score in the semester. Furthermore, SD in TA and TB was smaller comparing with those of the first semester of 2016, ranging from 13% to 17.9% and 13.2% to 17.5% respectively, which means students got higher score through the semester and the gap among students reduced greatly. In the first semester of 2017, with the same treatment as TA and TB, the study would like to see if TC and TD would display the same results. Mean in TC and TD was similar as that of TA and TB, with more than 80%. Quiz 3 was the one before the mid-term test, which normally got the highest score, with 89.2% in TC and 88.5% in TD. SD in TC and TD was similar as that of TA and TB as well, ranging from 12.8% to 17.4% and 12.9% to 16.9% respectively. From the results of the Quiz scores, we can see that many of the students engaged more into the tasks in treatment groups.

Table 5.12: Quiz scores

	CA		CB		TA		TB		TC		TD	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Quiz 1	69.3	18.1	68.4	17.3	82.5	17.2	82.5	16.4	87.3	17.4	85.5	16.9
Quiz 2	67.6	18.8	69.3	19.7	86.6	16.8	85.1	15.8	87.1	15.4	87.6	15.1
Quiz 3	76.1	27.4	75.2	28.5	87.2	13.0	87.7	13.2	89.2	12.8	88.5	12.9
Quiz 4	66.5	23.7	65.7	23.5	79.2	17.9	80.1	16.9	82.2	16.8	83.2	15.9
Quiz 5	75.7	20.4	75.6	21.3	83.1	15.2	81.5	15.4	83.1	15.2	83.9	14.8
Quiz 6	72.4	25.6	72.2	25.7	85.2	16.3	80.6	17.5	88.6	15.8	85.7	15.3

*Mean is the average score among students.

*Standard deviation (SD) means how much variation there is among subjects.

Chapter 6: Discussion

6.1 Introduction

This chapter will discuss the analysed results according to the order of research questions. In general terms, the study produced a variety of results, indicating quantitative gains in Quizlet activities and the listening activities. Qualitatively, gains were evident in all areas investigated, social interaction, teacher presence and task engagement outside of class, but no significant results were evident in the cognitive content of discussion among students.

In order to go further, I would like to briefly discuss the types and meaning of stickers in the current study. According to Lee *et al*. (2016), there are different types of emoticon served with various functions as the Table 6.1 and Table 6.2 show

Table 6.1. Usage pattern of emoticons (adapted from Lee *et al*., 2016)

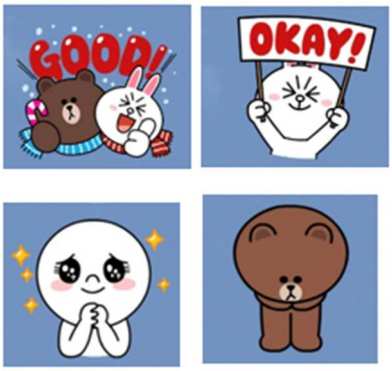
Phase	**Examples**
Text-based emoticon	:-) (°□°) (^_^)
Icon-style emoticon	😊👍♡😎
Sticker emoticon	

Table 6.2. Usage pattern of emoticons (Lee *et al*., 2016)

Pattern	**Subpattern**
Expression of emotion	• Various types of emotion • Intensity of emotion • Emphasis on emotion • Detailed explanation
Strategic use	• Self-representation • Maintenance of social status • Impression management • Social presence • Forming sympathy
Functional use	• Substitute for text • Social greeting • Supplement for text

From the beginning of the current study, we had no intention to analyse the meanings behind the stickers' usage, and also "expression of emotion" and "strategic use" were difficult to analyse in this study because we didn't ask about students' intentions as a part of the study. However, post hoc analysis of the data brought interesting results focusing only on "functional use."

As Table 6.3 shows, the functional use of stickers in LINE group from students, there was no case of stickers served as social greetings from students in LINE group. This could be explained that LINE group is mainly from teacher to students and the teacher always started the conversation first. Students in TA and TB posted two stickers and seven stickers, respectively

as substituting for text instead of saying “Ok” and “thank you.” On the other hand, students in TC and TD posted more stickers than those of TA and TB, making up 13 stickers and 63 stickers accordingly. Students in TC used more stickers as supplement for text (nine stickers) than stickers as substituting for text (four stickers). Meanwhile, the number of stickers used in TD was 63 times, making up the highest number in all treatment groups. Similarly, students in TD used stickers as supplement for text more than stickers as substituting for text. Figure 6.1 shows a sample of using stickers as substituting for text, usually instead of saying “Ok” and “thank you,” students just simply posted a sticker.

Table 6.3. Stickers’ usage in LINE group from students

Functional use	**TA**	**TB**	**TC**	**TD**
Substitute for text	2	7	4	21
Social greeting	0	0	0	0
Supplement for text	0	0	9	42
TOTAL	2	7	13	63

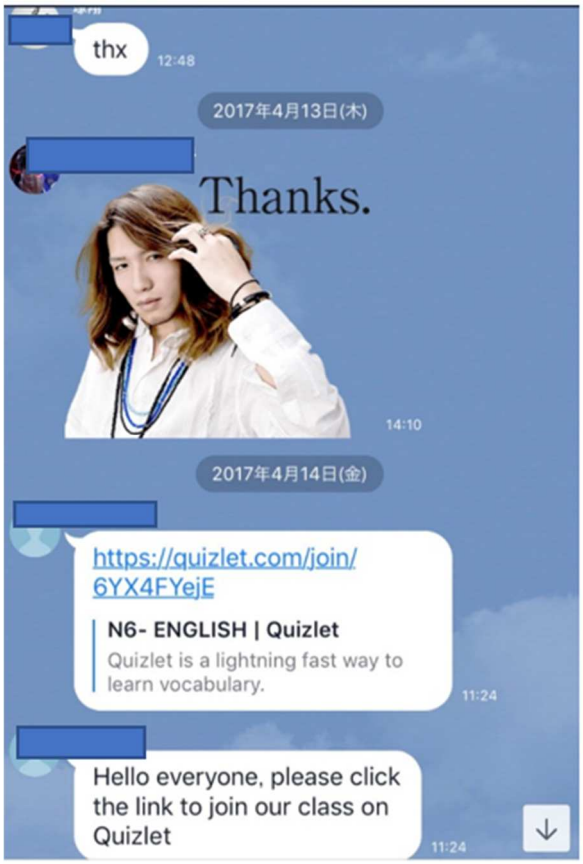


Figure 6.1. Sample of Sticker as Substituting for Text

As Table 6.4 shows the functional use of stickers in LINE individual from students. Surprisingly, there was no case of stickers served as social greeting in LINE individual from students either. The number of stickers in LINE individual in TA, TB and TC was much greater than that in LINE group, with 32 stickers, 49 stickers and 35 stickers respectively. It was interesting that students in TD sent less stickers in LINE individual than in LINE group, with 57 stickers, however, this figure was still the highest out of all treatment groups. Having said this, the students mostly replied to the teacher with stickers when they received compliments or advice from the teacher. The functional use of stickers in LINE individual was mainly supplement for text in all treatment groups TA, TB, TC and TD, with 30 times, 45 times, 32 times and 53 times respectively. Figure 6.2 shows a sample of using stickers as supplement for text, usually the following of saying “Ok” and “thank you.”

Table 6.4. Stickers' usage in LINE individual from students

Functional use	**TA**	**TB**	**TC**	**TD**
Substitute for text	2	4	3	4
Social greeting	0	0	0	0
Supplement for text	30	45	32	53
TOTAL	32	49	35	57

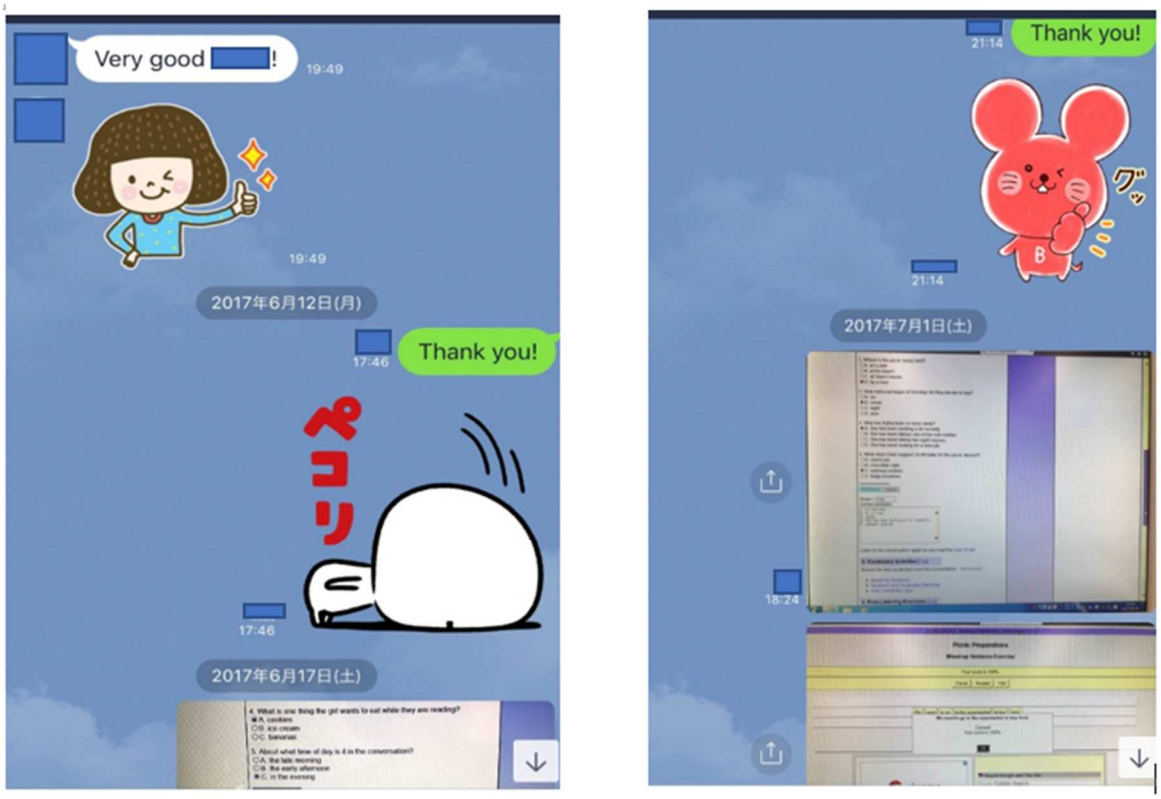


Figure 6.2. Sample of Sticker as Supplement for Text

In a nutshell, student preferred to use stickers as supplement for text in LINE individual, following their thank-you text and they preferred to use stickers as substituting for text in LINE group to express “acknowledgment.”

6.2 The nature of the discussion in online social interaction outside of class

First of all, the analysis of LINE interaction will be the answer for the research question *RQ1: What is the nature of the discussion carried out by participants in online social interaction outside of class?*

The nature of the discussion in online social interaction outside of class is divided into two types. The first one is the nature of the discussion in LINE group, the majority of the discussion is from teacher to student. The teacher used LINE group for sending materials, making reminders, requests and announcements related to class matters. This was perceived as cognitive presence of the teacher including information exchange, connecting ideas and apply new ideas (Garrison, Anderson, & Archer, 2000).

Excerpt 1:

November 17, 2016

17:04 Teacher Hello students, I hope you all well

17:04 Teacher And don't forget that we will have a Mid-term test next Monday, 21 November!

December 9, 2016

10:21 Teacher Good morning students! I hope you are well and enjoy your day! Please study vocabulary list Unit 10 (1-37) for Monday quiz. "

10:23 Teacher

https://www.dropbox.com/s/d5an9yxef6hwmyf/Unit%2010%20vob%20I.E.pdf?dl=0

10:24 Teacher

https://www.dropbox.com/s/gzmdwe1fb037vhz/Unit%2010-%20Competitors-IB.m4a?dl=0

10:24 Teacher It's the vocabulary unit 10 for those who were absent from class

10:25 Teacher And please listen to the record file for pronunciation.

December 17, 2016

19:43 Teacher Good evening students!

19:43 Teacher Please finish the evaluation form. Thank you!

In Excerpt 1, the teacher posted some reminders about the Mid-term Test and vocabulary units. She also linked the vocabulary handout with the recorded file so that students could practice pronunciation as well. As mentioned in the previous chapter, the "seen" function in LINE app is very helpful. In some of the teacher's reminders or announcements, a few students replied with "Ok, thank you" or simply "acknowledging stickers." The rest of class acknowledged that they received the teacher's posting with "seen." I think this function was convenient too. There were some postings that didn't require any replies from students, therefore when the teacher knew that her students saw the postings, she was relieved that students got the information she needed to convey. Moreover, there were some kinds of postings with no need of response, if the whole class were too keen on replying with "Ok, thank you" or sending too many "acknowledging stickers," the postings would become less noticeable and more difficult to find the posting again with sliding over all the stickers.

Furthermore, the teacher also gave advice or explanation to students who submitted Quizlet and the listening activities through LINE group. This could explain the categories of teaching

presence of the teacher including design and organization, facilitating discourse and direct instruction indicators (Garrison, Anderson and Archer, 2000).

Excerpt 2:

January 16, 2017

10:08 Kazumasa “クイズレットでユニット 12 を勉強中です！

https://quizlet.com/180960029/12-flash-cards/"

10:09 Kazumasa I’m sorry. I made mistake.

January 17, 2017

10:50 Teacher I received your Quizlet, student. Thank you!

10:52 Teacher "But four words need rewriting:

1. working-condition

2. working- experience

3. building-site

4. additional information

Please separate the words.”

12:31 Kazumasa Thank you!

Excerpt 3:

December 5, 2016

15:10 Genjiro [Photo]

15:10 Genjiro [Photo]

15:10 Genjiro [Photo]

15:11 Genjiro Test of Unit 7,8,9

15:12 Genjiro "クイズレットでUnit9:GOALS を勉強中です！

https://quizlet.com/172852712/unit9goals-flash-cards/"

15:12 Genjiro "クイズレットでUnit 8: moving forward を勉強中です！

https://quizlet.com/160331137/unit-8-moving-forward-flash-cards/"

15:12 Genjiro "クイズレットでUnit7:Communication を勉強中です！

https://quizlet.com/172857664/unit7communication-flash-cards/"

December 6, 2016

21:02 Teacher Please correct one word in Unit 9: make comparisons

21:05 Teacher Please correct the word "Fluently" in Unit 8 too

21:07 Teacher Everything else is good. Thank you!

12:07 Teacher [Sticker]

In Excerpt 2 and Excerpt 3, students reported what they had done outside of class to the teacher, the teacher checked their Quizlet folders and gave some corrections. This process was consuming; however, it was beneficial for students that they could learn from a skilled senior as mentioned in Meskill (2013) that the assistance from others and from the teacher make learning environment enjoyable and beneficial for all members.

Excerpt 4:

November 14, 2016

17:38 Manatsu Quizlet で World English 1 を学んでいます：

https://quizlet.com/153933933/world-english-1-flash-cards/

November 15, 2016

13:14 Phuong Tran Why did your list just have two words?

13:39 Manatsu "Sorry. I made a mistake. I had made another folder."

13:40 Manatsu Quizlet で英語インテンシブを学んでいます: https://quizlet.com/158427696/flash-cards/

14:50 Phuong Tran [Photo]

14:51 Phuong Tran You set up only you can see it, so I can't access. Please change the setting and share with me. Thank you!

15:08 Manatsu OK. Thank you.

In addition, Berge (1995) added one more category into teaching presence, that of a "technical" support role. This will require more of the instructor's responsibilities at the beginning when he/ she first introduces the tools. We understand that providing technical support to learners is an integral part of the teacher in this digital world, however, its importance and assistance will decrease as learners become more skilled and experienced and as the tools become more easy-to-access as can be seen in Excerpt 4. The teacher guided the student how to make Quizlet set and how to change the setting in the Quizlet app in order to share with the teacher.

In the current study, social interaction outside of class did appear to provide many of the conditions necessary for supporting learning (see Lomicka & Lord, 2016), such as establishing of a support network from the teacher and peers. Having said this, the teacher also tried to build a closer relationship with the students by telling her own experiences in Japan during New Year and requesting for students' responses as can be seen in excerpt 5. This is perceived as social presence of the teacher including open communication, group cohesion and affective expression (Garrison, Anderson, & Archer, 2000).

Excerpt 5:

January 3, 2017

15:59 Teacher Hello students, it's the third day of the New Year 2017. I wish you all healthy, beautiful (for girls), handsome (for boys) and successful in your study and life and love!

16:06 Teacher I went to the Yushima Tenjin Shrine to pray for me and my family, but it was so crowded. I had おせち and すきやき too. They were so delicious 👍👍👍♡

16:07 Teacher I had nattou too. I could eat it but I don't like it much 😀. It's healthy, so I may eat it sometimes.

16:07 Teacher Tell me if you have anything interesting and funny during these days.

16:35 Teacher You can share your story here, so everyone can read or you can send to me directly. Thank you!

Excerpt 6 shows one student replied in LINE individual to the teacher's posting, telling his own story during New Year. The teacher and the student could build a good relationship through this social chat. In fact, the teacher's purpose of this posting was to figure out if students were willing to share their private life as well as to trigger the conversation in English.

Excerpt 6:

January 3, 2017

16:52 Tatsuya "Hi! Ms.Tran. Happy new year! My name is Tatsuya. I visited my grandmother's home with my family. I ate "Osechi" and "Sukiyaki." It's so delicious! And I watched "Ekiden." It's so exciting!"

16:54 Teacher Happy New Year! Thank you for sharing your story.

16:55 Teacher I don't know "Ekiden." Is it a movie or something?

16:56 Tatsuya Ekiden is marathon by students!

16:57 Teacher Ah I see. I tried marathon in Vietnam too. So much fun! Have you ever tried?

16:59 Tatsuya I tried marathon around a junior high school student!

17:00 Teacher [Sticker]

17:00 Teacher And exercise keeps us fit and healthy!

17:01 Teacher Please send my wish to your grandmother and your family too!

17:01 Tatsuya [Sticker]

Even though there was no case of replying from the students about this matter in LINE group, another student shared their story with the teacher in LINE individual as Excerpt 7 displays:

Excerpt 7:

18:09 Maho Dear Tran sensei.

18:12 Maho Happy new year!

18:17 Maho In Oshogatu, I went to shopping in Kisarazu with my family. It was fun!👍

20:01 Teacher: Yes, thank you for telling me. I hope you had a wonderful time with your family!

20:02 Teacher: [Sticker]

Another student replied to the post about New Year's story a little later after she came back from the trip as Excerpt 8 below reveals:

Excerpt 8:

January 15, 2017

15:10 Asuka "Happy new year, Phuong.*

I'm looking forward to taking your class tomorrow! 😆"

15:10 Asuka [Sticker]

15:19 Asuka "I was on the business trip to Hawaii during this vacation,

and I got tan. 🤓 But I was able to have a precious experience!"

15:21 Asuka It's my interesting and kind of funny story during this winter.💭

15:22 Asuka Thank you. 😊

19:59 Teacher Wow. You went to Hawaii. That sounds great! It's been cold in Japan, so you could go somewhere with the sun to escape the cold.

19:59 Teacher You can tell me more about your trip tomorrow. 😊

19:59 Teacher [Sticker]

**The student called the teacher "Phuong" despite being told not to. In the interview, she said she felt closer with the teacher by calling her first name like other foreign teachers.*

In fact, according to in-class discussion and observation, students could have an engaged talk about their New Year's activities with the teacher in the next class after the holiday. They asked the teacher many different questions such as where she went, what she ate and what she thought of Japanese New Year. Some students talked about their hometown's customs or their trips to some other cities for New Year as well.

The second type is the nature of the discussion in LINE individual, which was different from LINE group. LINE individual was mainly from student to teacher. Students would like to use LINE individual with teacher to report their homework or extra activities they did outside of class as well as to ask teacher about class-related matters such as Tests or Quizzes as can be seen in Excerpt 9 and Excerpt 10. The teacher showed her social presence, cognitive presence and teaching presence not only in LINE group but also in LINE individual. Excerpt 9 and Excerpt 10 show some samples of interactions in LINE individual as following:

Excerpt 9:

April 17, 2017

9:24 Moe *Dear Teacher. I submit my homework*

9:24 Moe *[Photo]*

April 18, 2017

15:44 Teacher *Hello, it's very good*

15:44 Teacher *And try to listen again to get a better score!*

15:45 Teacher *[Sticker]*

April 23,2017

18:27 Moe *Hello! Thank you [heart emoticon]*

18:29 Moe *I will do my best to get a good score*

18:29 Moe *[Photo]*

18:29 Moe *[Photo]*

Excerpt 10:

July 12, 2017

19:47 Yuina *I have a question about testing. ESL get to test, too?*

July 13, 2017

15:44 Teacher No. ESL is not for the test.

July 13, 2017

0:55 Yuina I understood. Thank you!

1:08 Yuina Listening test print Unit 6-8-9-10, I do not know the answer. I'd like you to send a textbook listening Unit 4~6.

9:59 Teacher But It's the test. I can't send you the answer. And Unit 4~6, we already listened in class.

15:58 Yuina Ok! Thank you!

6.3 The role of the teacher in facilitating discussion

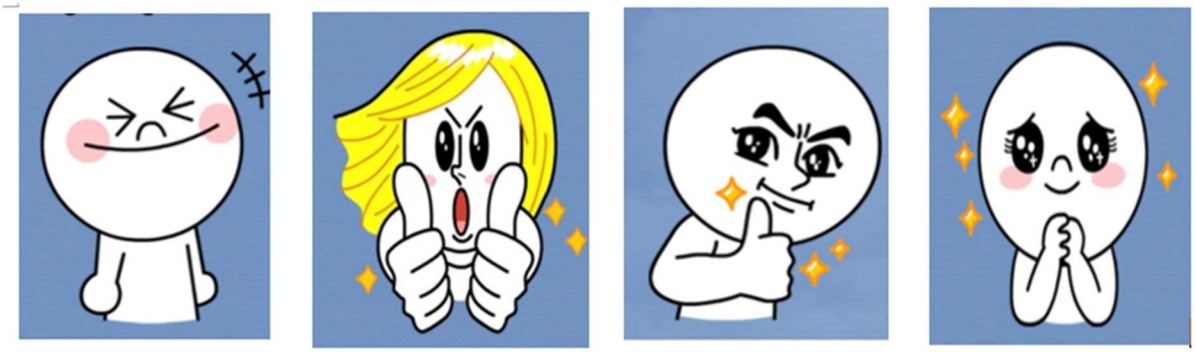
The analysis of the nature of discussion is to define the answer for the research question RQ1a: What is the role of the teacher in facilitating discussion?

As the previous part mentioned about the nature of discussion in LINE, this part will discussion in detail the role of the teacher in facilitating discussion in LINE group and LINE individual. There are three main roles of the teacher in the discussion.

The first one is social presence role of the teacher in the discussion. According to Garrison, Anderson and Archer (2000), social presence including open communication with risk-free expression, group cohesion with encouraging collaboration and affective expression with emoticons. In LINE group discussion, the teacher is the one opening communication with risk-free expression for all students in a non-threatening environment where students could send to the teacher or to other classmates with short and informal messages, making group cohesion by encouraging collaboration in encouraging students to send competitive Quizlet test scores or matching scores and Listening scores as well as having affective expressions with sticker emoticons to make the discussion friendlier and smoother. In LINE individual, students were

the ones who started the conversation first, therefore, the teacher only showed her social presence role by making affective expressions. Some samples for social presence role of the teacher as following:

- Open communication: *"Dear students, I hope you are well and enjoy your weekend! Please listen to the audio for vocabulary Unit 10 to practise pronunciation. See you all next week!"*
- Group cohesion: *"These are our pictures today. We look great! Let's work hard and study hard for this semester"*
- Affective expression: *"You're studying hard!" "You're good!" "You can do it"*



The second one is cognitive presence role of the teacher in the discussion. According to the theory of Community of Inquiry by Garrison, Anderson and Archer (2000), cognitive presence including triggering event (e.g., sense of puzzlement), exploration (e.g., information exchange), integration (e.g., connecting ideas) and resolution (e.g., apply new ideas). In LINE group, there was no case of cognitive presence role of the teacher. Some cases of cognitive presence in LINE individual as following:

- Triggering event:

Excerpt 11:

11 June 2017

18:07 Mami *[Photo]*

21:47 Teacher *good!*

21:47 Teacher *Please send me the listening too*

22:52 Mami *Can't play back audio. What's happened?*

22:52 Mami *[Photo]*

In Excerpt 11, the student didn't know what happened with the audio through esl-lab.com, so the teacher explained that she might have trouble with the Internet or the website was frozen and asked the student to check the Internet and try to listen again. It worked after that. In this case, the student triggered the cognitive presence of the teacher by rising the question.

▶ Exploration:

Excerpt 12:

April 20, 2017

14:06 Ryo *[Photo]*

14:06 Ryo *It is very fast!*

22:15 Teacher *So please click on Quiz script to look at the text at the same time.*

April 21, 2017

17:09 Ryo *Ok!*

17:09 Ryo *[Sticker]*

17:10 Ryo *[Photo]*

20:15 Teacher *That's correct, Ryo!*

20:16 Teacher *Very good!*

20:16 Teacher *[Sticker]*

June 24, 2017

12:56 Ryo *[Photo]*

22:15 Teacher *Good Ryo! But please send me the exercises following the listening too!*

June 25, 2017

11:32 Ryo *[Photo]*

11:33 Ryo *Is it correct?*

20:00 Teacher *Yes, it is correct!*

20:00 Teacher *[Sticker]*

20:01 Teacher *[Photo]*

In this case (Excerpt 12), the cognitive presence of the teacher was to help the student explore that he could listen to the audio and look at the script at the same time. Also, the teacher showed him where to do other exercises following the listening with the screen shot of the website and marked where to click on. The student sent a screen shot to confirm if what he was doing was correct. After that, he could finish all the activities following the listening with good scores after that.

▶ Integration:

Excerpt 13:

7 May 2017

14:50 Ryo *[Photo]*

14:51 Ryo *[Photo]*

14:52 Ryo *It was heard a little*

19:08 Teacher *Please listen again and again to understand and practice pronunciation*

19:09 Teacher *And do the following exercises too*

19:20 Ryo *I listen many times*

19:57 Teacher *That's good*

19:57 Teacher *[Sticker]*

The teacher and the student in Excerpt 13 were having a conversation about how to get a better score in listening. In other interactions, the teacher already suggested the student that he should look at the script if the listening was too fast for him. He could listen better after that, and in this conversation, the teacher connected the idea of listening the exercise again and practicing the pronunciation as well. The teacher connected among doing the listening exercises, practicing pronunciation and practicing grammar and vocabulary by doing exercises following the listening. In this sense, the teacher showed the cognitive presence.

▶ Resolution:

Excerpt 14:

12 July 2017

15:02 Taka *Hello Tran teacher. My name is Taka.*

15:11 Taka *Do you have Teachers paper of ALPS?*

15:52 Teacher *I do. The University sent me email. I can fill in and submit.*

15:55 Taka *Ok. What should I do?*

18:44 Teacher *I will do everything, so don't worry*

18:44 Teacher *[Sticker]*

18:54 Taka *Thank you very much!*

18:55 Taka *[Sticker]*

As Excerpt 14 shows the cognitive presence of the teacher in solving the student's matter. In fact, this student already asked the teacher about the application for the advanced English club in class. But at that time, the teacher didn't have any paperwork yet, he sent to LINE individual to ask again. The University will select two students from teacher's recommendation, therefore

the student would like to be chosen. In addition, Excerpt 15 reveals another resolution from the teacher. She suggested some questions that the student might be asked during the interview so that he could prepare. Besides, she agreed to help him practice speaking as well as suggested recording the answers for him.

Excerpt 15:

July 18, 2017

18:57 Takahiro *There is an Interview in English*

18:58 Takahiro *What kind of countermeasures should be taken?*

19:04 Teacher *I think they will ask you some questions, for example. 1. Why do you want to participate in ALPS? 2. How often do you study English? 3. What do you want to become in the future? 4. Introduce yourself in English (or your hobbies)*

19:06 Teacher *So you should prepare for some answers. If you need help to check your answer. Please send to me. Good luck!*

19:08 Takahiro *I see. Thanks! But I am not confident in speaking. What day is Tran Teacher at the University?*

19:15 Teacher *I'm at the campus every Thursday.*

19:15 Takahiro *I hope you can help me practice speaking if possible!*

19:16 Teacher *Yes, I can. And you can send me the answers, I will check for you and I will record it and you can study at home too.*

19:18 Takahiro *Ok. Thank you.*

The third one is teaching presence of the teacher in the discussion. This is the most noticeable role of the teacher in the discussion. Even in the theory of Community of Inquiry by Garrison, Anderson and Archer (2000) suggested that teaching presence have three sub-categories including design and organization, facilitating discourse and direct instruction, the findings in

the current study found one more sub-category of teaching presence role of the teacher as a reminder as following:

- Designer and organizer: In LINE groups, teacher was the one who designed and organized the curriculum of the course including planning what kind of materials to send to the groups as Excerpt 16 shows:

Excerpt 16:

April14, 2017

11:24 Teacher [http://quizlet.com/join/6YX4FYjE]

11:24 Teacher Hello everyone, please click on the link to join our class on Quizlet.

11: 25 Teacher [Sticker]

April 18, 2017

16:03 Teacher Hello everyone, thank you for sending me your exercises. And please try to practice more to get 100% before sending to me.

16:03 Teacher Don't forget to listen on esl-lab.com and send me what you do! Thank you. Have a great day!

July 2, 2017

17:55 Teacher Here are some listening Quizzes for your practice too.

17:56 Teacher [Photo]

17:56 Teacher [Photo]

17:56 Teacher [Photo]

17:56 Teacher [Photo]

17:57 Teacher *[Audio file 1]*

17:57 Teacher *[Audio file 2]*

17:57 Teacher *[Audio file 3]*

17:57 Teacher *[Audio file 4]*

17:57 Teacher *[Audio file 5]*

17:57 Teacher *[Audio file 6]*

17:57 Teacher *[Audio file 7]*

17:57 Teacher *[Audio file 8]*

Considering the limited class time, when it was two weeks away from the Mid-term test or Final test, the teacher often sent listening Quizzes along with the audio files through LINE group so that students could practice outside of class time as can be seen in Excerpt 16. Meanwhile, in other weeks, the teacher sent in-class handouts, gave advice on Quizlet activities and the listening activities on the website esl-lab.com. In addition, during the interview session, some comments from students to show the teaching presence included, *"Sending the materials through LINE by the teacher is easy to know what to do" or "I could keep track of which activities I should be doing."*

- Facilitator: From the observation, the teacher realized the difficulties in doing the exercises following listening units were that students didn't know where they were, and they couldn't do those exercises on their smart phone. Therefore, the teacher gave some guidance, *"Here is the website esl-lab.com, please click on Full Desktop Version if you listen on your mobile phone, then choose the title you want to listen in the Easy part"* with illustrated pictures as Figure 6.3 shows.

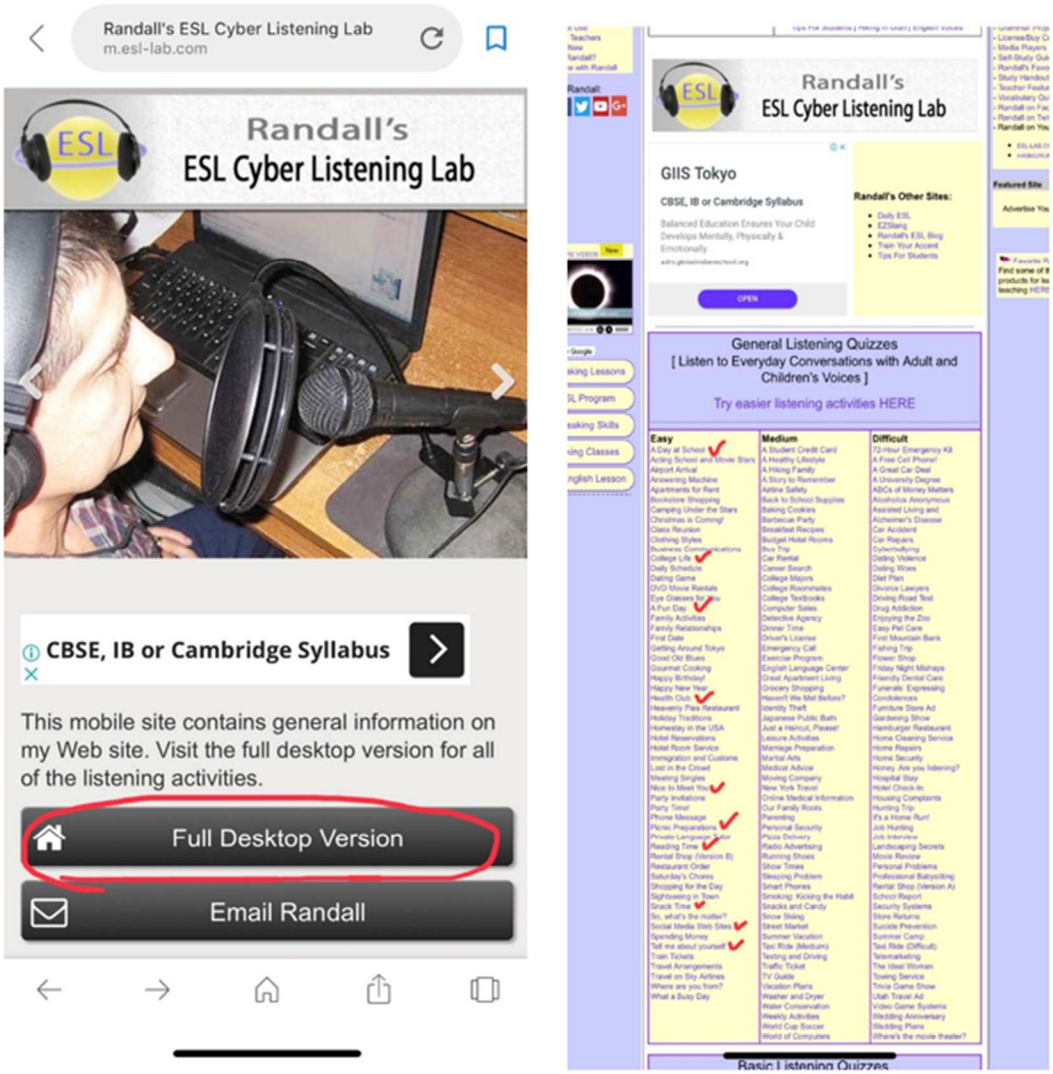


Figure 6.3. The illustration of the website esl-lab.com

The teacher explained more that if students would like to see the script, they could click on "Quiz Script" at the same time, and then after the listening, students should do the exercises following each listening to understand the talk better and practice grammar and vocabulary as well as can be seen in Figure 6.4.

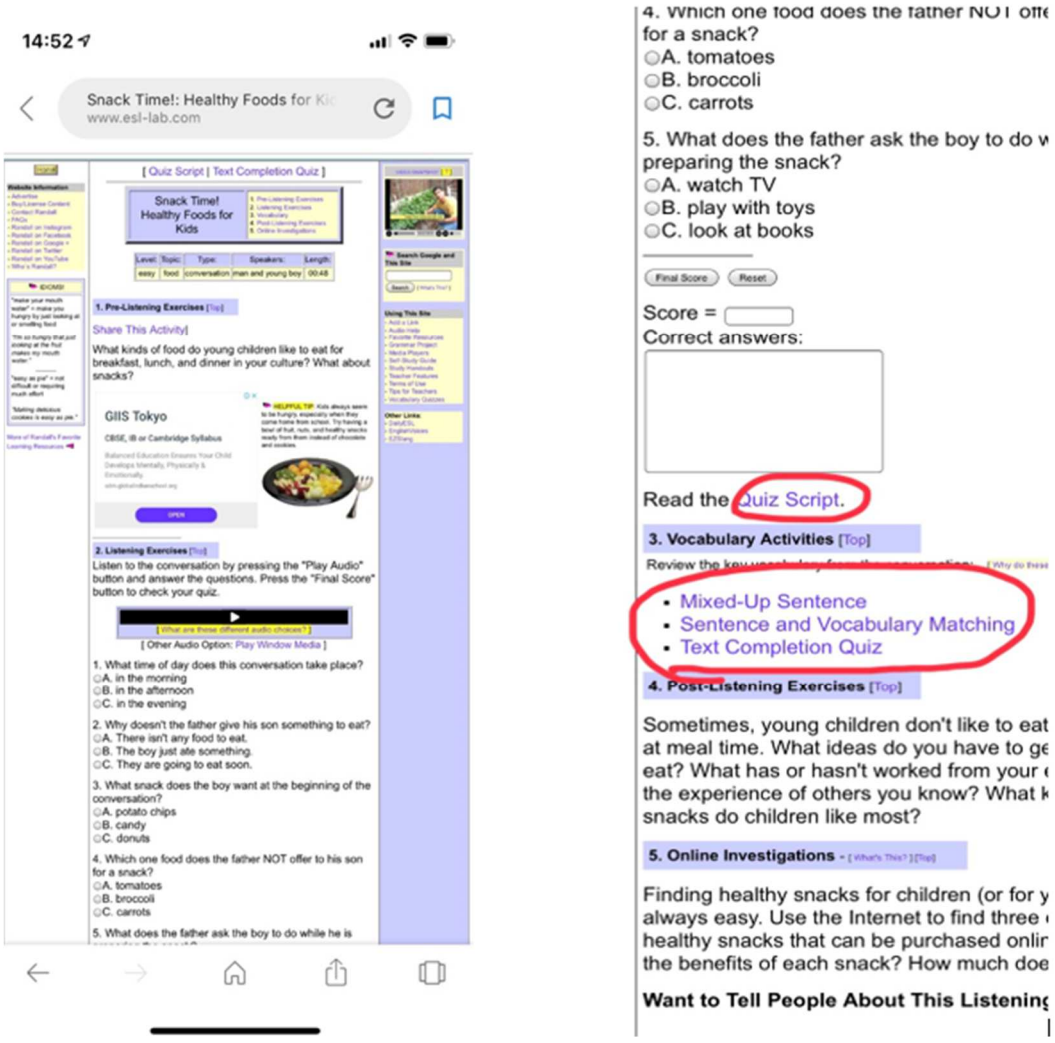


Figure 6.4. The illustration of Vocabulary Activities in the website esl-lab.com

Some other comments on teacher's facilitating discourse as following, *"Teacher's instruction on how to make Quizlet set is easy to follow," "Teacher's guidance on how to use all the function of Quizlet is quite helpful," "Teacher's guidance on how to do the exercises following Listening unit is useful."*

- Direct Instruction: In both LINE group and LINE individual, the teacher gave several direct instructions to students in how to make Quizlet sets, fixing the incorrect Quizlet folders as well as giving instructions to class-related matters as can be shown in Excerpt 17.

Excerpt 17:

Jan 15, 2017

21:11 Hiroyuki "Dear Ms. Tran. Good evening! I will send homework by LINE (2lisening)."

21:12 Hiroyuki [Photo]

21:12 Hiroyuki [Photo]

21:12 Teacher Please share Quizlet unit 11 and unit 12 here too. Thank you!

21:13 Teacher I got your listening 's homework.

21:13 Teacher See you tomorrow!

Jan 18, 2017

17:42 Hiroyuki "Dear Ms. Tran. I will send homework by LINE (Quizlet). I'm late, sorry..."

17:42 Hiroyuki "クイズレットでUnit11 を勉強中です！ https://quizlet.com/175195350/unit11-flash-cards/"

17:42 Hiroyuki "クイズレットでUnit12 を勉強中です！ https://quizlet.com/178965259/unit12-flash-cards/"

Jan 19, 2017

10:55 Teacher "Please correct Unit 11: healthcare "

10:55 Teacher Other words are good!

10:55 Teacher [Sticker]

10:55 Teacher Thank you!

In addition, students thought that *"It's helpful to get teacher' correction of my Quizlet set"* when they shared their Quizlet folders and the listening activities to the teacher, *"The teacher replied to my messages quickly and gave me advice if my Quizlet sets are correct or not" and*

"I could get advice from the teacher more easily through LINE." One student expressed his appreciation to the teacher when she helped him with the interview's questions, fixing the answers and introducing him some other materials in preparation for the placement test of advanced class, he said, *"I could enter the advanced class thanks to the teacher's help with practising the interview. I really appreciate Tran teacher"*

- Reminder: Teacher role through online social interaction as a reminder didn't mentioned in the Community of Inquiry, however, in data analysis of this current study showed many cases as following:

Excerpt 18:

May 24, 2017

20:38 Teacher *Hello everyone! To prepare for your Mid-term Test and get a good score, please listen and do the listening quiz in the files I send below. The test will be in the files. Thank you!*

20:40 Teacher *Mid-term Test.zip*

June 7, 2017

20:19 Teacher *[Photo]*

20:20 Teacher *[Photo]*

20:20 Teacher *For someone who was absent from class on Monday, June 5. Next week's Quiz will be the first 15 words (No.1 to No.15) in the vocabulary list I sent above!*

In Excerpt 18, the teacher sent reminders for the test and the vocabulary Quiz and her reminders served as a request as well. It might raise some arguments that why the teacher had to remind

University students all the time what they needed to study, however, in this current study, students were very low proficiency level of English according to the University's proficiency placement test, they might not fully understand what the teacher explained in class about what they needed to do outside of class, reminders were a need. The reminders could serve as a push for students to do Quizlet activities and the listening activities. Some comments from students included, "*The teacher's reminders were like an alarm because I often forgot what I needed to do."; "I often check if I already submitted the exercises when I see teacher's reminder."*

In sum, teacher presence was shown clearly in this current study in terms of social presence, cognitive presence and teaching presence. Also, there are not many studies could show the "Direct Instruction" role of teaching presence according to the literature, this current study shows that teacher could give direct instruction to students' Quizlet sets and the listening activities as well as giving instruction in how to improve students' English study through both LINE group and LINE individual. This could be perceived as one of the most successful point of the study.

6.4 Learner preferences for individual and group social interaction

Joining LINE group is necessary to form a learner community for the whole class with the hope that students can construct their understanding of content with guidance and support from peers and instructors, therefore the venue potentially serves the educational community well (Meskill, 2013). The analysis of LINE discussion is to answer for the research question *RQ1b: What are learner preferences for individual and group social interaction?*

When being asked during the interviews, students had two preferences for LINE discussion. The first one is LINE group, students preferred LINE group is for the teacher to send materials and make announcements or reminders. They would prefer other students to report their

homework or extra-activities to teacher's LINE account so that they didn't get so many notifications. Some students reported that *"I turned off LINE group notification because it's quite annoying, so sometimes I missed the teacher's announcement."* However, other students said that *"But seeing other students' scores on Quizlet tests and matching activities was quite exciting and it encouraged me to try harder."* On the other hand, one student mentioned that *"But we always tried to get 100% before sending to the teacher, so no point of posting in LINE group."* The conversation went on with other idea that *"But if I saw you already posted, I tried to finish to send to the teacher too."* In a nutshell, students agreed that LINE group is mainly for the teacher and general class-related matters only *"I prefer other students just sent to LINE group about studying matters related only."* In general, they prefer the cognitive presence and teaching presence in LINE group.

The second one is LINE individual, students thought that *"It is convenient to report what they did outside of class to the teacher by LINE*" because *"I can track what I already sent easily."* In fact, this point is the same as that of the teacher. The teacher thinks that it's easier to track what students reported through LINE individual comparing with LINE group. In LINE group, there were so many messages from students that makes it difficult and time-consuming to find what each student reported. Moreover, some students said that *"I don't want other students to know my sores,"* which could be understandable because Japanese students in general are shy and appreciate their privacy. In sum, students preferred all three elements of Community of Inquiry including social presence, cognitive presence and teaching presence in LINE individual.

6.5 Online social interaction as a support for language learning outside of class

Students had different preferences for LINE group and LINE individual, therefore the instructor would like to figure out if the discussion through LINE outside of class could lead to any desired

learning outcomes in order to answer the research question *RQ2: How do learners perceive online social interaction as a support for language learning outside of class?*

From the present research, it was obvious that it was very challenging to provide training such as learning strategies through LINE. The language used in LINE group and LINE individual was English with the hope that students could read the postings again in their free time and would try to reply in English. However, in LINE group, there were very few cases of responses, except for acknowledging messages that they received teacher's postings. This could be explained that students were in low-proficiency English class, therefore they were not well-prepared to reply to the teacher in English. Moreover, they were not familiar with discussing in English in groups for the fear of losing face, or simply they were not sure how and what they should ask about their studying. Stockwell and Hubbard (2014) proved that providing learner training where students were able to discuss their learning among members could lead to more engagement in learning activities; however, in the current study, using online group interaction alone did not reach this goal. On the other hand, the social interaction in LINE group used to support learning outside of class in this research was mainly from the teacher to send extra-materials, reminders, announcements and also served as a confirmation tool role from students. In fact, there were greater number of interactions outside of class through LINE, which built up a closer relationship between the instructor and the learners. Some students said that *"I could send to the teacher in my convenient time."* and *"I think I could contact the teacher easily."* They also mentioned that they could sense the learning community through LINE group as well. This might be one of the reasons why students were engaged more into learning activities.

In addition, in LINE individual, there were strong impacts on students' engagements in learning activities when they could receive the teacher's instructions and feedbacks directly. It was evident that there were more Quizlet activities and the listening activities done outside of class sent to the teacher's LINE account within treatment groups. Students used LINE individual as

a reporting tool to report their homework or extra-activities they did outside of class. LINE individual also served as a requesting tool for students to seek for advice or information from the teacher. Some comments from students included, *"I could submit my homework in a comfortable way." "I could ask the teacher to give me advice on studying TOEIC.,"* or *"It's easier for me to send short messages to the teacher to ask for advice."*

From the students' viewpoint of online social interaction as a support for language learning outside of class, we concluded three main roles of social interaction in supporting learning as followings:

- As a student-to-teacher reporting tool: The students use online social tool to report back to the teacher on what they have done or achieved as long as seek and receive advice on learning.
- As a social community discussion tool: The students socially interact with each other and the teacher in order to build a non-threatening learning community. Also, it is a "social tool" in the sense of allowing spontaneous interaction between participants.
- As teacher-to-student reporting tool: It is a teacher direction tool, for example: teacher giving direction, give instruction or giving reminder, feedback, etc.

6.6 Attitude towards learning in online social interaction

The comparison of the discussion in LINE interaction and without LINE interaction between to two proxy-control groups CA and CB versus two treatment groups TA and TB is to answer for the research question *RQ2a: Is there a difference in attitude towards learning when learners participate in online social interaction compared to when they do not?*

Students in two proxy-control groups CA and CB didn't have the common learner community through LINE group as those in two treatment groups TA and TB even though they were the

same students. Based on the interview and in-class discussions, the instructor made some comparison as followings:

In the first semester of 2016, students in CA and CB didn't do as many activities as expected outside of class because they thought it was voluntary to do and the teacher didn't check seriously. The teacher did remind and encourage them to do, though. They said the teacher introduced the website esl-lab.com and Quizlet app in class; however, if they had problem in doing the activities outside of class, they had to wait until the following week to ask the teacher because they didn't know how to explain in the email. Therefore, sometimes they just gave up doing so. They also thought they would do it if they had more free time.

In the second semester of 2016, the same students in Class A and Class B served as treatment groups TA and TB joined LINE group. First of all, students didn't think that interaction through LINE would have a great impact on pushing them to do the activities outside of class, however, student's attitudes were positive towards using LINE for study discussion purposes. In fact, students were surprised because the teacher checked what they did thoroughly and gave them feedbacks and advice, which they couldn't receive without the online discussion in the first semester. This was perceived as one of the main motivations for students to keep doing the extra-activities outside of class. Some comments from the students included, *"the feedback through SNS was useful," "pictures of illustration on how to do the listening activities were easy to understand what I need to do."*

Other students expressed that they could feel that they belonged to a learning community through LINE while they could work with the teacher and other resources (Reinders & Hubbard, 2013). The data also showed that teaching presence, social presence, and cognitive presence in communities of inquiry (CoI) (Garrison, Anderson & Archer, 2000; Swan & Shea, 2004; Garrison, Cleveland-Innes & Fung, 2010) had a great impact on learner engagement in both the

community itself and in tasks and activities as well (as mentioned by many students in the interviews, in-class discussions and surveys).

6.7 The presence of the teacher as a support mechanism in learning outside of class

The attitudes from students towards learning in online social interaction were positive in general. However, the researcher would like to know students' thoughts about the presence of the teacher in assistance them outside of class, the interviews and in-class discussions were to answer for the research question *RQ2b: Do learners feel the presence of the teacher is a support mechanism in learning outside of class?*

It was proved that students engaged much more in the activities with the support of LINE interaction. One of the reasons was that they could feel the presence of the teacher even outside of class through her constant reminders, announcements and providing materials. Some comments from the students consisted of, "The teacher sent materials, feedbacks and correction through LINE was helpful," "it was appreciated that the teacher checked my Quizlet folders and made some corrections." Some other students thought that they wouldn't do any extra-activities without the teacher's reminders and so-called requests.

Of course, in order to succeed in online instructional situations, it is the intertwisted role of a skilled teacher and engaged learners in a social and instructional environment that promotes and supports learning (Meskill & Anthony, 2010; Smith & Mehta, 2013). The teacher in this current study was dedicated her time and skills in playing different roles in the discussion. Sometimes she showed her social presence to make the interactions friendlier and smoother, sometimes she had to show her cognitive presence to enhance the discourse and some other times, she showed her teaching presence to make the best of the learning outcomes for her students.

6.8 Teacher's teaching presence, cognitive presence and social presence in the interactions

In general, students could feel the presence of the teacher in supporting them outside of class, however, the researcher would like to figure out to what extend they understood teacher's teaching presence, cognitive presence and social presence in the interactions in order to answer the research question *RQ2c: How do the learners perceive teacher's teaching presence, cognitive presence and social presence in the interactions?*

Students acknowledged that LINE allowed for a far greater amount of informative and friendly interaction between the teacher and students. In particular, they thought "It was amazing to have the teacher's LINE account." Having said this, students mentioned in the interviews that the teacher in this current study was the only one they had LINE account. Therefore, they felt so close with the teacher. In this sense, they could feel the social presence of the teacher in an attempt to build a non-threatening learning environment for them.

In LINE group, it was difficult to see the cognitive presence of the teacher because if the students confused about Quizlet activities, the listening activities or class-related matters, they seemed to ask the teacher through LINE individual. However, in LINE individual, cognitive presence of the teacher showed clearly in how she exchanged information with students, leading them to explore different functions in Quizlet app as well as introducing other types of listening activities in the website esl-lab.com. Some comments from students included, *"I followed her guidance and I could do all the exercises I need," "I could learn something new from chatting with the teacher."*

Teaching presence of the teacher could be seen in both LINE group and LINE individual when she gave advice to the whole class or to a single student. Besides, the teacher was the one who facilitated the interaction, leading them to learning purposes. In fact, she was trying to build

learner's autonomy outside of class. However, with the low proficiency level of students in this current study, this aspect was not so successful. The students still depended on the teacher's reminder and passively waiting for the teacher to send extra-materials. There were only two students that the instructor could see their clear autonomy in learning English because they would like to join the advanced English class in order to prepare for study abroad.

6.9 Teacher presence affects online discussion and task engagement

After analysing the students' perception of three subcategories of the teacher presence including social presence, cognitive presence and teaching presence (Garrison, Anderson and Archer, 2000), the research would like to figure out to what extent teacher presence affected the interaction and the active implementation of tasks in order to answer for the research question *RQ3: How does teacher presence affect online discussion and task engagement?*

According to the interviews, in-class discussions and surveys, teacher presence played a crucial role in fostering online discussion and task engagement. In LINE groups, the majority of postings was from the teacher to the students, therefore teacher presence was reflected through the announcements, reminders and materials sent in LINE groups. In addition, teacher presence was displayed in the illustrated pictures as guidance on how to do Quizlet activities and the listening activities. In LINE individual, teacher presence was embedded in every aspect of the interactions from checking the activities students reported, giving feedbacks and corrections to encouraging them with compliments and advice to better their English studies.

It was evident that learners show a higher degree of task engagement with the support of teacher presence through online interaction, especially nearly triple of activities done in comparison among proxy control groups and treatment groups. When being asked the reason why learners

were actively engaged in doing Quizlet activities and the listening activities outside of class, some students said, “I just obeyed what the teacher told me to do.” This comment was considered as “being requested.” But when the teacher told them that she asked them to do the similar tasks in the first semester of 2016, but they didn’t obey. Students said, “but this semester, the teacher asked us to do the tasks with her support outside of class through LINE, so we did them more often.” Having said this, student sensed the teacher presence outside of class as a motivation for them to do the extra-activities. Even students perceived their engagement in the tasks outside of class as “obedient students” or “being requested,” the good side was that they did the tasks engagingly. For learners with the low proficiency level of English, we couldn’t require them to be motivated, autonomous and actively engaged in extra-tasks outside of class while they didn’t have any idea what those meant. They simply thought they just did what the teacher asked them to do. In this sense, at least we could build up some available online resources for students for future use.

6.10 Other observations

In this current study, there were some interesting observations through in-class observations, discussions and interviews but they didn’t fit in any categories above.

From beginning, the study would like to focus on the use of technology on mobile phone, but some of the listening activities required the use of computer as well, therefore we asked the students what they thought about the way they did Quizlet activities and the listening activities. Some comments on the use of mobile phone in doing the Quizlet tasks as following, “Making Quizlet sets took time but doing Quizlet activities was quick, so I could do on the train,” “I prefer to do the exercises with my phone but my data was limited, so I often did at home or at the University when I had wifi,” “I wanted to do the activities with my phone too but my battery ran out so quickly.”

In terms of the way learners did the listening activities, they preferred to do all the exercises with their mobile phones as well, but they had to do the mixed-up sentence, sentence and vocabulary matching and text completion quiz through computer. That was one of the reasons preventing them from doing those activities. Some students said, “I don’t have a computer at home, so I couldn’t do them,” “I only listened to the main listening and did multiple choice exercises on my phone. I thought it would be enough!.” Some students thought they compromised by doing more main listening activities with multiple choice exercises through their mobile phones than going to the computer room just to do other exercises following the listening units. This was understandable because this extra task was voluntary, the teacher couldn’t force students to do what they didn’t like or something they felt troublesome, rather than the teacher just gave them advice and encouragement.

Even it was troublesome for some students in doing some of the listening activities on mobile phones and some other activities on computers, some other students thought the mixed-up sentence, sentence and vocabulary matching and text completion quiz were easy and fun to do, so they didn’t mind sitting in the computer room to do so when being requested by the teacher.

Students realized that it was convenient and easier for them to do the Quizlet activities and the listening activities on mobile devices, but there were some constrains that should be take into consideration such as data usage and battery usage. Another constrains of using mobile phones for doing the activities was the distractions within the device (Tran, 2018). Some students said they got distracted while doing the activities when they received notifications from other apps or messages from their friends.

The sense of studying in a Community of Inquiry (CoI)

Based on the teacher’s observation and interviews, students had different views on the sense of studying in a Community of Inquiry (Garrison, Anderson and Archer, 2000). Students in Class

B and Class C had lower motivation and lower language abilities, they seemed to prefer cognitive presence than social presence in LINE group with the evidence that the students didn't post much in the LINE group. However, students in Class A and Class D had higher motivation and better language abilities, they seemed to prefer both social presence and cognitive presence in LINE group. Students in these two classes were more active and more sociable in LINE group. Interesting, all four classes preferred to have teaching presence in LINE group as a facilitating medium. Having teaching presence in the background while out of class appeared to have a positive impact on task engagement for students in all classes.

Different types of engagement reflected in this study follow Philp & Duchesne (2016)

As mentioned in the literature, engagement is defined as a multidimensional concept that comprises cognitive, behavioural, social, and emotional dimensions of engagement among second and foreign language learners in the classroom (Philp and Duchesne, 2016). The findings of the current study showed that there was a close correlation between teacher presence's teaching presence, cognitive presence and social presence and students' cognitive, behavioural, social, and emotional engagement.

The first dimension is cognitive engagement, which is reflected through the fact that the students did the Quizlet tasks and listening task engagingly with the support from the teacher in private LINE conversations and in-class discussions.

The second dimension is behavioural engagement, which is presented in terms of time on task or participation. In other words, students' behavioural engagement was shown through nearly triple of Quizlet activities and listening activities done in comparison to the proxy control groups and the treatment groups.

The third dimension is social engagement, which is defined as "students' feelings of connection to (or disconnection from) their school (Yazzie-Mintz, 2009). Students in the current study had a sense of learning communities through online social interactions with the teacher and peers

so that they could work more on Quizlet tasks and listening tasks.

The last dimension is emotional engagement, which is described as having an impact on success of task-based interaction between interlocutors (Storch, 2002), especially among younger learners and adolescent learners where affiliation is a powerful social goal (Philp & Duchesne, 2008). Students in this study showed their emotional engagement into tasks when they could feel the teacher presence embedded in the teacher's correction of their Quizlet sets, giving them encouragement or through giving advice on the listening strategies.

Chapter 7. Conclusion

This chapter provides the conclusions and implications of the study, followed by suggestions for further research.

According to the current literature into second language acquisition, theories of social interaction and learning, there are a number of necessary conditions for learners to acquire acquisition. There must be adequate input for the learner, interaction must occur and be meaningful to the learner, and the learning environment must be non-threatening enough to allow the learner to interact with his/her interlocutors without fear of embarrassment. A further—and equally important point—is that learners must be motivated to learn the language with the support from their teacher and peers.

The recent literature has also seen a gradually increase in the variety of research in the use of social networking for teaching and learning. Moreover, understanding the features of the social interactions that maintain learning in a community can provide participants a means of communications between external and internal situations that create learning opportunities (Rachamim & Orland-Barak, 2016). Unfortunately, studies into the benefits to language learners' engagement through online social interaction with the support of the teacher presence has been scarce.

Certainly, theories of second language acquisition and social interaction and learning would suggest that social tool such as LINE can provide the platform for acquiring a second language. However, not only learners apply their own patterns in social interaction for language learning, but teachers also apply their teaching patterns in social interaction for teaching strategies as well (Byrne, 1976, 2016). The advantages in being able to produce language learning and

provide language teaching which are available to receive feedback and advice from a skilled and senior interlocutor through the social interaction is also widely accepted. It seems that given the nature of the medium of social interaction tool, it is well suited to provide the type of encouragement which learners need in fostering their learning with the continuous support of teacher presence.

Thus, this study has investigated the nature of social interactions between the students and the teacher over a period of three semesters, to determine whether there are quantitative gains in vocabulary and listening tasks, as well as whether the teacher presence is a push to have improved qualitatively and quantitatively of the nature of the interactions and task engagement over the period. A variety of tests were conducted on the data produced by the participants and the results were then analysed.

7.1 Summaries of Significant Results

Engagement on tasks outside of class has been always a challenging research for teachers and educators all over the world. The major goals of this current study were to investigate and find out the role of teacher presence and the role of online social interaction for promoting task engagement outside of class. It was evident that there were some impacts on task engagement as the consequence of the teacher's support in students' discussion through both LINE group and LINE individual and along with teacher presence, social interaction also plays an integrate role in enhancing studying outside of class. The findings presented from the analysis of LINE logs, Quizlet logs, the listening activities, in-class observations, surveys and interviews allow the author to come up to the following remarks.

(1) In terms of the role of teacher presence, based on the theory of Community of Inquiry (Garrison, Anderson and Archer, 2000), teacher presence in this current study had all three elements including social presence, cognitive presence and teaching presence. From the

findings, the first element is teacher's social presence having the same categories as the theory suggested consisting of open communication, group cohesion and affective expression. The teacher plays a role of starting the conversation, making balance for the interaction and giving encouragement to the whole class. Similarly, the second element is teacher's cognitive presence with the same characteristics as in CoI mentioned including triggering event, exploration, integration and resolution. The teacher encouraged students in raising the questions, exploring their weakness and strength and trying to figure out the solution for students' learning. The last element is teacher's teaching presence including design and organization, facilitating discourse and direct instruction., however, we added one more characteristic to the original theory, that is reminder. The teacher showed her experiences and skills in guiding students how to do the tasks in general; giving feedbacks and corrections as well as advice. The teacher also showed her humble side as a reminder, simply in promoting task engagements among learners.

(2) With regard to the role of online social interaction, as mentioned in Tran (2018), there are three main roles of social interaction. The first role is as "a social community discussion tool" where learners can have friendly conversation and discussion with the instructor and group members. It is called a "social tool" because of its features which allow unconstrained dialogues among interlocutors. Considering the low proficiency level of English of participants in this study, this free and easy interaction may be served as a motivating medium for them to use English in a non-threatening environment. Also, they can feel a sense of belonging to a group that they can share their learning with. The second role is as "teacher-to-student reporting tool." The teacher can use this social interaction as a tool to share her expertise, for example, sending extra-materials, giving instructions and guidance, sending reminders and announcements, providing feedbacks and advice and so on. As mentioned in the previous part, this may raise some arguments as creating this online social interaction tool outside of class means the teacher has to dedicate her time for her students beside the formal class time as well. This could be a

burden because of time consuming, however, the good side of this setting is that this would serve as some fundamental steps for students to "build their habits of learning outside of classroom which may ultimately lead to autonomous learning behaviour." The third role is as a "student-to-teacher reporting tool." The students use this online platform to communicate with the teacher, report what they have done outside of class or seek for advice in a friendly way.

(3) As regards impacts on task engagement, Hong (2008) claimed there is a closely relationship between teachers' language use and students' engagement levels in the classrooms. In this current study, the teacher's language use is present even outside of classroom through the online social interaction tool, leading to nearly three times of students' engagement in the designed tasks as well. Moreover, Van den Branden (2016) emphasized the teacher plays a major role in motivating students through well-designed tasks that are both challenging and closely matched to their needs. In this sense, the teacher in this study organized the listening tasks and vocabulary tasks for students in Listening classes. The teacher also acknowledged the need to involve students through tasks that are strongly suitable and achievable with her support outside of the formal class setting.

This leads to another important point that was evident in the study. There was a considerable variation in the amounts of Quizlet activities and the listening activities produced by the learners over the interaction period. While possibly attributable to motivational reasons or teacher's support, some of the learners sent very few messages to LINE group, while others produced numerous messages. It also appeared that learners of a higher proficiency were more likely to produce higher numbers of messages and higher numbers of Quizlet and the listening activities, but the direct relationship was not investigated in this study. Learners themselves appeared to enjoy LINE interactions and the website esl-lab.com which was expressed in the interviews, and many learners indicated that they would continue to study on the website esl-lab.com in the future.

In conclusion, it was evident that the online social interaction tool had the potential to promote task engagement with the support of teacher presence. In addition, through the social interaction platform, the teacher and the students could establish a more open relationship. Another advantage was that the social interaction tool allows the great number of the teacher presence role in supporting students' learning, which could lead them to engage more into the designed tasks. This may be concluded that there is an intertwisted relationship between the role of the teacher presence and the role of online social interaction that make the success of students' task engagement.

The implications of the study are as follows. In fact, the study was quite large and longitudinal, the results suggested that during the course of the interactions, learners could sense the support from the teacher presence, provided they had produced sufficient extra activities to benefit from online social interactions. However, the actual gains to individual learners depended heavily on the learners themselves and possible also on whether or not the learners actively used the teacher support for their learning purposes. The fact that many of the gains in task engagement were evident from all treatment groups. Likewise, it may be significant that the research was for a fixed period, meaning that learners themselves sought to use the time as effectively as they could, and improve their language learning as much as they could during the time.

It was evident that the learners participating in online social interactions produced higher number of activities outside of class, but the learners in the study were low proficiency level of English. Therefore, there were few interactions between students and students in LINE group interaction, and the results showed that learners of higher abilities were more likely to be the higher producers of messages and activities. The results also suggest that not all learners are as enthusiastic about participating in such LINE interactions and doing extra activities and that provision for learners who are not as willing to devote time to interacting with other learners and with the teacher as well as doing such activities should be made.

7.2 Implications of Results for Teaching

An analysis of Quizlet activities and the listening activities done outside of class indicated that a significant number of interactions occurred outside normal class hours as well. The implications for this fact on teaching are significant. Both teacher and students have to be ready for the interactions, although this may not require both parties to be online at the same time. The teacher has to set up a certain time to send materials and reminders or other class-related matters to the groups as well as to receive the reported tasks from students. It is advised that teachers should use a different device and set up a different account exclusively for the online social interaction with the students or else this will be troublesome with all the notification badges and sounds when students submit their assignments. In addition, the fact that learners sent messages and reported their work extensively outside of normal class hours could also be evidence for increased motivation and engagement into the tasks on the part of the learners with the support of social networking and teacher presence.

The point regarding students in Class D using the LINE group of English class for other classes' purposes as a reminder or announcement, however, not all students in Class D involved in those discussions. As mentioned in the result chapter, the teacher in this study received some complaints from students in the interview about this matter while they didn't belong to the group that other students had some postings about, they felt quite annoying. This is implied that the teacher should make some rules from the beginning of semester that the LINE group is only for the English class they are attending, hence they shouldn't post something unrelated. If they would like to post something for other classes, they should make a new LINE group for the involved members. Thus, teachers who intend to integrate social interaction into their curriculum must be aware of this tendency for learners to use the social interactions for learning purposes within involved members, and make sure that guidance on how to use social tools must be provided from the beginning of the study.

Another point regarding technical support to lessen the work for teachers. It is important to maintain a presence of technical support, and to avoid the questions about how to make Quizlet sets and all the functions on Quizlet app, teachers should make a manual with illustrated pictures on show to use Quizlet apps and how to access the website esl-lab.com. If possible, this manual should be in students' mother tongue and their target language for low proficiency language learners. In terms of support for the listening activities on the website esl-lab.com, teachers can suggest students to use computer room to do the exercises following the main listening unit such as mixed-up sentence, sentence and vocabulary matching and text completion quiz that require some functions from computer if students don't possess a computer at home. However, this task is voluntary, teachers should explain the benefits of doing the task and make a manual on how to do the task as well. As similar as Quizlet app's manual, if possible, the Listening manual should be in both languages with illustrated pictures. In addition, it is advisable that teachers can make some compromise for students who would like to only do the main listening unit with the multiple-choice exercises with their smart phones. For example, during the semester, students are expected to listen 10 main listening units with all the exercises following the unit, which means 40 activities. Teachers can allow students to only listen the main listening units with multiple-choice exercises with the requirement that they have to listen 40 main listening units to compromise what they miss from other activities. However, this requirement has to be told from the beginning of the semester with students' agreement.

Another major implication for teaching regarding task engagement is online social interaction along with teacher presence. From this study, it was clear that learners only started to show their engagement into the designed tasks when they joined the LINE interaction. However, only LINE interaction without teacher presence might not lead to the success of the study. For teaching learners of low proficiency level of language, teachers have to devote their time from the beginning of the semester to set up a common learning community so that teachers can show

their presence even outside of class because it was perceived as a motivating medium. It was evident in the study that students did more activities when they sensed the presence of the teacher in following and checking what they had done outside of class. Similarly, there is also a need to ensure that both learners and teacher maintain a sufficient number of interactions in which teachers can play a role of a facilitator for the whole discussion because of students' low language proficiency.

In addition, there is also a need to integrate social networking tool, especially in this study, LINE interaction as a part of the instruction of the course, and learners need to be taught how to use LINE app in order to gain maximum benefit from interactions with the teacher and with peers. This was also clearly shown in the current study, and the need to make learners aware of several aspects of LINE app such as how to save and upload the materials in LINE, how to listen the audio files in LINE and looking at the script at the same time. Having said this, students may know how to use LINE for chatting, but they may not know how to use other functions in LINE for learning purposes. Thus, when designing the curriculum with social networking tools, teachers need to make sure that learners know all the functions of the tools and know how to use the tool in an effective way.

Another very important implication for teaching is the ratio of the number of activities done with the number of postings in LINE group. This ratio was clear in Class C and Class D. Students in Class D had more postings than that of Class C, leading to there were more Quizlet activities and Listening exercises done in Class D comparing to that of Class C. As a result, when designing online social interaction as a supporting element for learning such as the one in this thesis, it becomes quite clear that in order to maximise learning, there is a need to maintain comparable numbers of postings from students with learning purposes served as an encouraging motive for other students to follow.

Another implication of this study regarding the use of Quizlet app. Some students expressed that because of the smart suggestion system in the mobile phones, sometimes they didn't need to remember exactly how to write the words, they just simply chose the words the phone suggested. However, selecting the correct suggestion of words is a way of acquiring the language. There was one problem was that when they did the vocabulary quizzes in class, they were paper-based versions without any suggestions. Therefore, their scores in the tests of the Quizlet app were often higher than their scores in the paper-based tests. There could be two options for teachers who would like to integrate Quizlet as a part of the curriculum. The first option is that teachers could ask students to turn off the smart suggestions both when they study the Quizlet set and when they do the test, only turn on when they make the set themselves for the convenience. The second option is that teachers could ask students to do the Quizlet test in the computer room because there is no function of word suggestions in computer for Quizlet test. In this way, it would save time for teachers to mark the paper-based version of the quizzes as well.

7.3 Implications of Results for Research

This study has demonstrated that both quantitative and qualitative gains were found in the number of meaning units through online social interactions and the number of Quizlet activities and the listening activities produced by students. Although there are a number of questions regarding this matter which remains unanswered and require further research. The first of these is that the correlation between gains in task engagement demonstrated in the LINE interaction and gains in language proficiency such as speaking, and writing remain unexplored. Having demonstrated, in the scope of this study, that vocabulary proficiency gains are evident through the Quiz scores as described in section 5.10, there is a need to test learners at various points through the LINE interaction for other aspects of language proficiency such as listening, speaking and writing. Secondly, there is a need to confirm whether or not vocabulary

acquisition per se is actually occurring thanks to the teacher presence during the LINE interactions.

One of the most important aspects which require further investigation is the period of task engagement. In this study, gains in task engagement happened during the period of the semester with the teacher presence through LINE interactions. Research over a longer period would be beneficial in determining whether the engagement occurs without teacher presence or without the interactions, or whether the learners cease to benefit from understanding how to access the online resources for self-study after a certain point. Without further study, this issue still remains conjectural. In the present study, there was no intention to measure learners' vocabulary proficiency, although there were some gains in the Quiz scores between control groups and treatment groups. Further study could focus on measuring the pre and post vocabulary proficiency to have a clearer image whether the task engagement leading to the gains in language proficiency.

Another point which requires further research is that it appears that the majority of gains in task engagement were made by a group of higher ability learners. While no explicit tests were made for proficiency gains for various ability levels, in the context of this study, the learners that participated most effectively in LINE group and LINE individual interactions were generally the higher ability learners. As a result, it may be necessary to investigate for various ability levels to determine whether or not a relationship exists between gains task engagement through social interactions with teacher presence and student ability. Also, the majority of the learners actively participated in the interactions in the present study were female. As most of the female learners were also of a higher ability, it was difficult to ascertain in this study whether their better engagement in the tasks and in the interactions was due to their gender or their second language ability, but such an outcome certainly warrants further investigation. In addition, there were also a range of other background factors which also require a more detailed

investigation for their effects on online interactions such as the learners' habits of using smart phones and learning apps.

Furthermore, one function in the Quizlet app that wasn't used by both the teacher and students in the current study was Quizlet Live when the teacher can set up a game for the whole class during class hours or outside of class. This function is perceived as a motivating medium to show teacher presence and learning community. However, because of the context of the study, there was no data to prove this. Therefore, it is important that further research be performed to determine whether or not this is indeed the case for more task engagements.

Furthermore, theories on how to sustain learning outside the classroom suggest that learners are more likely to engage in tasks and activities if they see a clear relationship between what they undertake and their learning goals, but learners also need to feel that there is sufficient presence from the teacher with appropriate feedback (Heift, 2004). The present study indicated that social networking with the support of teacher presence had an impact on task engagement itself, with the triple of tasked produced comparing to that of without interactions on social networking, but further research is necessary to determine what other factors led to this great increase and how the relationship between the teacher and students may bring a more desired teaching and learning experience. Further, learners may have improved their technological skills over the period of a certain time, meaning that they have become more proficient at using the Quizlet app and the website esl-lab.com, which might lead to gains in tasks' production, and that this skill is independent of their language proficiency. Despite this, until such time as these other factors are investigated, the extent to which the increases in task engagements shown in the results reflects actual quality of social interactions and teacher presence remains uncertain, hence further research in this area is essential.

The comparison of different classes with different level of English proficiency reacted to teacher's postings differently. Students in treatment groups TC and TD were all beginners of English but based on the University placement test system including 8 levels with level 8th at the highest. Students in TC were level 4 and students in TD were level 6. Considering teacher posted the same materials and reminders to both LINE group TC and TD, the reactions from TD were more active with replying messages and stickers than that of TC. Also, the activities done by TD were higher than that of TC as well. In such circumstances, further research into the relationship between learner's ability and engagements into tasks and interactions is necessary.

A third point which requires further research regarding vocabulary is whether or not learners have indeed acquired vocabulary items through all the medium such as LINE group and LINE individual interactions, Quizlet activities and the listening activities. It would be possible for further research to formulate a picture of the vocabulary items which have been acquired through the medium before and after semester and to also investigate the retention rates of the items some time after the interactions have concluded.

7.4 Final Remarks

In conclusion, this study clearly shows that the role of teacher presence through online social interaction provide a variety of improvements in task engagements outside of class, both qualitatively and quantitatively. While there were some differences among learners' preferences in using LINE group and LINE individual, students were keen on enjoying the interactions through the social networking tool in general for learning purposes. Learners did not exhibit a wider range of discussions on learning strategies among group members over the interaction period because of some language ability constrains. Furthermore, the great increase in task engagements can be seen in all treatment groups, although this was more evident in the

number of productions of Quizlet activities than that of the listening activities. In addition, the role of teacher's social presence, cognitive presence and teaching presence plays as a main part for the success of the interactions, indicating that gains in the number of activities done by students across the interaction period. Thus, establishing an online social networking platform with the support of teacher presence such as the one outlines in this thesis can afford the learners an opportunity to foster their task engagement outside of class in a way that is effective and motivating.

REFERENCES

AbuSeileek, A.F., & Qatawneh, K. (2013). Effects of synchronous and asynchronous computer-mediated communication (CMC) oral conversations on English language learners' discourse functions. *Computers & Education*, *62*, 181-190.

Acar, I-H., Hong, S-H., & Wu, C-R. (2017). Examining the role of teacher presence and scaffolding in preschoolers' peer interactions. *European Early Childhood Education Research Journal,* 25(6), 866-884.

Álvarez Valencia, J.A. (2016). Language views on social networking sites for language learning: the case of Busuu. *Computer Assisted Language Learning, 29*(5), 853–867.

Amichai-Hamburger, Y. (Ed.). (2005). *The social net: Human behaviour in cyberspace.* Oxford: Oxford University Press.

Anderson, J. (2016). "Why PPP Won't (and Shouldn't) Go Away." Paper presented at the IATEFL, Birmingham. http://www.jasonanderson.org.uk/downloads/why_ppp_wont_and_shouldnt_go_away.pdf.

Anderson, T., Rourke, L., Garrison, D.R., & Archer, W. (2001). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks*, *5*(2).

Annand, D. (2011). Social presence within the community of inquiry framework. *The International Review of Research in Open and Distance Learning*, *12*(5), 40–56.

Arbaugh, J.B. (2001). How instructor immediacy behaviours affect student satisfaction and learning in web-based courses. *Business Communication Quarterly*, *64*(4), 42–54.

Arbaugh, J.B., & Hwang, A. (2006). Does "teaching presence" exist in online MBA courses? *The Internet and Higher Education*, *9*, 9–21.

Baird, D., & Fisher, M. (2016). Neomillennial user experience design strategies: Utilizing social networking media to support "always on" learning styles. *Journal of Educational Technology Systems, 34* (1), 5–32.

Baker, J.D. (2004). An investigation of relationships among instructor immediacy and affective and cognitive learning in the online classroom. *The Internet and Higher Education*, *7*, 1-13.

Baralt, M., Gurzynski-Weiss, L., & Kim, Y. (2016). Engagement with language: How examining learners' affective and social engagement explains successful learner-generated attention to form. In M. Sato & S. Ballinger (Eds.), *Peer interaction and second language learning. Pedagogical potential and research agenda* (pp. 209–240). Amsterdam, The Netherlands: John Benjamins.

Barnes, D. (2008). Exploratory talk for learning. In N. Mercer & S. Hodgkinson (Eds.), *Exploring talk in school* (pp. 1–16). London, UK: Sage.

Barnes, M. (2018). Encouraging language development through and online community: Lessons learnt from an action research project. In M. Barnes, M. Gindidis & S. Phillipson (Eds.), *Evidence-based learning and teaching: A look into Australian classrooms* (pp. 35–47). Abington: Routledge.

Barnett, S. L. (2017). *Social interaction, identity formation and substance use in the first-year transition to college* (Order No. 10273714). Available from ProQuest Dissertations & Theses Global. (1901490581). Retrieved from https://search.proquest.com/docview/1901490581?accountid=14891

Bartnikowska, U, (2017). Significance of touch and eye contact in the polish deaf community during conversations in Polish sign language: Ethnographic observations. *Hrvatska revija za rehabilitacijska istraživanja*, 53, 175–185.

Beer, D., & Burrows, R. (2007). Sociology and, of and in Web 20.0: Some initial considerations. *Sociological Research Online*, *12* (5).

Benson, P. (2001). *Teaching and researching autonomy in second language learning.* Harlow: Pearson Education Limited.

Benson, P., & Voller, P. (2013). *Autonomy and independence in language learning*. Abington: Routledge.

Berge, Z.L. (1995). Facilitating computer conferencing: Recommendations from the field. *Education Technology*, *15*(1), 22–30.

Berge, Z.L., & Collins, M.P. (2000). Perception of e-moderators about their roles and functions in moderating electronic mailing lists. *Distance Education: An International Journal*, *21*(1), 81–100.

Bevan, B., Bell, P., Stevens, R., & Razfar, A. (2013). *Lost opportunities: Learning in and out of school time.* Dordrecht: Springer.

Biesenbach-Lucas, S. (2003). Asynchronous discussion groups in teacher training classes: Perceptions of native and non-native students. *Journal of Asynchronous Learning Networks*, 7 (3).

Biggs, J.B. (1993). What do inventories of students' learning processes really measure? A theoretical review and clarification. *British Journal of Educational Psychology*, *63*, 1–17.

Biggs, J.B. (1999a). *Teaching for quality learning at university*. Buckingham: Open University Press.

Biggs, J.B (1999b). What the student does: Teaching for enhanced learning. *Higher Education Research & Development*, 18 (1), 57–75.

Blake, R.J. (2013). *Brave new digital classroom: Technology and foreign language learning.* Washington, DC: Georgetown University Press.

Bloch, J. (2007). Abdullah's blogging: A generation 1.5 student enters the blogosphere. *Language Learning & Technology*, *11*, 128-141.

Block, D. (2007a). The rise of identity in SLA research, post Firth and Wagner (1997). *The Modern Language Journal*, *91*(5), 863–876.

Blyth, A. (2011). Cookies and breadcrumbs: Ethical issues in CALL. *ELT Journal, 65* (4), 470-472.

Blyth, A. (2015). Social media ethics. *The JALT CALL Journal, 11* (2), 165-176.

Boersma, A., Dam, G.T., Wardekker, W., & Volman, M. (2016). Designing innovative learning environments to foster communities of learners for students in initial vocational education. *Learning Environment Research*, *19* (1), 107–131.

Boersma, A., Dama, G.T., Volmanb, M., & Wardekkerb, W. (2010). This baby…it isn't alive. Towards a community of learners for vocational orientation. *British Educational Research Journal*, *36* (1), 3–25.

Boström, L., & Lassen, L.M. (2006). Unraveling learning, learning styles, learning strategies and meta-cognition. *Education + Training*, *48* (2/3), 178-189.

Breen, M. (1989). The evaluation cycle for language learning tasks. In R.K.Johnson (Ed.), *The second language curriculum* (pp. 187-206). Cambridge University Press.

Brierton, S., Wilson, E., Kistler, M., Flowers, J., & Jones, D. (2016). A comparison of higher order thinking skills demonstrated in synchronous and asynchronous online college discussion posts. *NACTA Journal*, *60*(1), 14+. Retrieved from

http://link.galegroup.com/apps/doc/A448136577/AONE?u=waseda&sid=AONE&xid=0db68276doi:10.1017/S0958344017000222

Brockett, R. G., & Hiemstra, R. (1991). *Self-direction in adult learning: Perspectives on theory, research, and practice*. New York: Routledge.

Brown, J. D., & Coombe, C. (2015). *The Cambridge guide to research in language teaching and learning*. Cambridge: Cambridge University Press.

Bruner, J. (2001). Self-making and world-making. In J. Brockmeier & D. Carbaugh (Eds), *Narrative and identity: studies in autobiography, self and culture* (pp. 25-37). Amsterdam: John Benjamins.

Burn, A. (2003). Poets, skaters and avatars—Performance, identity and new media. *English Teaching: Practice and Critique*, 2(2), 6–21.

Burston, J. (2013). Mobile-assisted language learning: An annotated biography of implementation studies 1994-2012. *Language Learning & Technology, 17* (3), 157-255.

Busse, V., & Walter, C. (2013). Foreign language learning motivation in higher education: A longitudinal study of motivational changes and their causes. *The Modern Language Journal, 97* (2), 435-456.

Byrne, D. (1976). *Teaching oral english*. London: Longman.

Caffarella, R. S., & Caffarella, E. P. (1986). Self-directedness and learning contracts in adult education. *Adult Education Quarterly*, *36* (4), 226–234.

Camilleri, M.A., & Camilleri, A.C. (2017). Digital learning resources and ubiquitous technologies in education. *Technology, Knowledge & Learning*, *22*(1), 65-82.

Candy, P. C. (1991). *Self-direction for lifelong learning: A comprehensive guide to theory and practice*. San Francisco: Jossey-Bass.

Cappellini, M. (2016). Roles and scaffolding in teletandem interactions: a study of the relations between the sociocultural and the language learning dimensions in a French–Chinese teletandem. *Innovation in Language Learning and Teaching, 10* (1), 6-20.

Carr, N. (2011). *The shallows: What the Internet is doing to our brains*. MacMillan: New York.

Chan, M. (2011). Shyness, sociability, and the role of media synchronicity in the use of computer-mediated communication for interpersonal communication. *Asian Journal of Social Psychology, 14* (1), 84–90.

Chang, W-C., Wang, T-H., Lin, F.H., & Yang, H-C. (2009). Game-based learning with ubiquitous technologies. *IEEE Computer Society*, *13*(4), 26-33.

Chen, H.-I. (2017). Intercultural communication in online social networking discourse. *Language and Intercultural Communication, 17* (2), 166-189.

Cheon, J., Lee, S., Crooks, S. M., & Song, J. (2012). An investigation of mobile learning readiness in higher education based on the theory of planned behavior. *Computers & Education*, *59*(3), 1054–1064.

Chik, A. (2014). Digital gaming and language learning: Autonomy and community. *Language Learning & Technology 18* (2), 85-100.

Christenson, S., Reschly, A., & Wylie, C. (2012). *Handbook of research on student engagement*. New York, NY: Springer.

Chun, D., Kern, R., & Smith, B. (2016). Technology in language use, language teaching, and language learning. *Modern Language Journal, 100* (1), 64-80.

Clarà, M., & Barberà, E. (2013). Learning online: massive open online courses (MOOCs), connectivism, and cultural psychology. *Distance Education*, *34* (1), 129-136.

Cobb, T., & Horst, M. (2001). Reading academic English: Carrying learners across the lexical threshold. In J. Flowerdew & M. Peacock (Eds.), *Research perspectives on English for academic purposes* (pp. 315-329). Cambridge: Cambridge University Press.

Coffield, F., Ecclestone, K., Faraday, S., Hall, E., & Moseley, D. (2004). *Learning styles and pedagogy: A systematic and critical review*. Learning & Skills Research Centre, London, available at: www.lsrc.ac.uk

Cook, V. (2016). *Second language learning and language teaching*. New York: Routledge, https://doi.org/10.4324/9781315883113.

Crookes, G., & Schmidt. R. W. (1991). Motivation: Reopening the research agenda. *Language Learning*, *41* (4), 469–512.

Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management Science*, *32*, 554-571.

Darics, E. (2014). The blurring boundaries between synchronicity and asynchronicity: New communicative situations in work-related instant messaging. *International Journal of Business Communication*, *51*(4), 337–358.

Davis, F. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly,13*(3), 319-340. doi:10.2307/249008

Davis, F., Bagozzi, R., & Warshaw, P. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science, 35*(8), 982-1003.

De Jaegher, H., & Paolo, E.D. (2007). Participatory sense-making: An enactive approach to social cognition. *Phenomenology and The Cognitive Sciences*, *6*, 485-507.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum.

Deluca, D., & Valacich, J.S. (2006). Virtual teams in and out of synchronicity. *Information Technology & People, 19*(4), 323-344.

Dewey, J. (1959). My pedagogic creed. In J. Dewey (Ed.), *Dewey on education* (pp. 19-32). New York: Teachers College, Columbia University.

Diaz, R., Swan, K., Ice. P., & Kupczynksi, L. (2010). Student ratings of the importance of survey items, multiplicative factor analysis, and the validity of the community of inquiry survey. *The Internet and Higher Education*, *13*(1–2), 22–30.

Dörnyei, Z. (1990). Conceptualizing motivation in foreign-language learning. *Language learning*, *40*, 45–78.

Dörnyei, Z. (1994). Motivation and motivating in the foreign language classroom. *The modern language journal*, *78* (3), 273–284.

Dörnyei, Z. (2001). *Teaching and researching motivation*. Harlow: Longman.

Dörnyei, Z., & Kubanyiova, M. (2014). *Motivating learners, motivating teachers: building vision in language education*. Cambridge: Cambridge University Press.

Dörnyei, Z., & Ushioda, E. (2011). *Teaching and researching motivation* (2nd ed.). Harlow: Pearson Education.

Dörnyei, Z., MacIntyre, P. D., & Henry, A. (Eds.). (2015). *Motivational dynamics in language learning.* Bristol: Multilingual Matters.

Drago, W.A., & Wagner, R.J. (2004). Vark preferred learning styles and online education. *Management Research News*, 27 (7), 1-13.

Dreyer. C., & Nel, C. (2003). Teaching reading strategies and reading comprehension within a technology-enhanced learning environment. *System, 31* (3), 349-365.

Dunn, R., & Griggs, S.A. (1995). *Multiculturalism and learning style: Teaching and counseling adolescents*. Westport, CT: Praeger.

Dunn, R., Dunn, K. and Perrin, J. (1994), Teaching Young Children through Their Individual Learning Style, Allyn & Bacon, Boston, MA.

Edwards, T. (2012). Sensing the rhythms of everyday life: Temporal integration and tactile translation in the seattle deaf-blind community. *Language in Society, 41*(1), 29-71.

Ellis, R. (2017). The routledge handbook of instructed second language acquisition. In S. Loewen & M. Sato (Eds.), *Task-based language teaching* (pp. 108-125). New York: Routledge.

Elvers, G. C., Polzella, D. J., & Graetz, K. (2003). Procrastination in online courses: Performance and attitudinal differences. *Teaching of Psychology, 30* (2), 159-162.

Engle, R.A., & Conant, F.R. (2002). Guiding principles for fostering productive disciplinary engagement: Explaining an emergent argument in a community of learners. *Classroom, Cognition and Instruction*, *20* (4), 399-483,

Fischer, A. (2011). Gendered social interactions in face-to-face and computer-mediated communication. In A. Kappas & N.C. Kramer (Eds.), *Face-to-face communication over the Internet: Emotions in a web of culture, language and technology* (pp. 53-78). Cambridge: Cambridge University Press.

Flowerdew, J., & Miller, L. (2008). Social structure and individual agency in second language learning: Evidence from three life histories. *Critical Inquiry in Language Studies*, *5*(4), 201-224.

Fredricks, J. A., & McColskey, W. (2012). The measurement of student engagement: A comparative analysis of various methods and student self-report instruments. In S. L.

Christenson, A. L. Reschly & C. Wylie (Eds.), Handbook of research on student engagement (pp. 763–782). New York, NY: Springer.

Fuchs, C., & Snyder, B. (2013). It's not just the tool: Pedagogy for promoting collaboration and community in social networking in CMC. In M.-N. Lamy & K. Zourou (Eds.), *Social networking for language education* (pp. 117-136). Basingstoke: Palgrave Macmillan.

Fuchs, C., Hauck, M., & Müller-Hartmann, A. (2012). Promoting learner autonomy through multiliteracy skills development in cross-institutional exchanges. *Language Learning & Technology*, *16* (3), 82–102.

Fuchs, C., Snyder, B., Tung, B., & Han, Y.J. (2017). The multiple roles of the task design mediator in telecollaboration, *ReCALL, 29* (3), 239–256.

Fuchs, T. & De Jaegher, H. (2009). Enactive intersubjectivity: Participatory sense-making and mutual incorporation. *Phenomenology and The Cognitive Sciences, 8*, 465–486.

Fullan, M. (2013). *Stratosphere: Integrating technology, pedagogy, and change knowledge*. Don Mills, Canada: Pearson.

Gallagher, I.E., & Savage, T. (2016). Comparing learner community behaviour in multiple presentations of a Massive Open Online Course. *Journal of Computing in Higher Education*, *28*(3), 358–369.

Gao, X. (2010). *Strategic language learning: The roles of agency and context*. Bristol, UK: Multilingual Matters.

Gardner, R.C. (2001). Integrative motivation and second language acquisition. In Z. Dörnyei & R. Schmidt, (Eds.), *Motivation and Second Language Acquisition* (pp. 1–20). Honolulu, HI: University of Hawaii Press.

Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly*, *48* (1), 18–33.

Garrison, D.R. (2003). Cognitive presence for effective asynchronous online learning: The role of reflective inquiry, self-direction and metacognition. In J. Bourne & J.C. Moore (Eds.), *Elements of quality online education: Practice and direction* (pp. 29–38). Needham, MA: Sloan Consortium

Garrison, D.R., & Arbaugh, J.B. (2007). Researching the community of inquiry framework: review, issues, and future directions. *The Internet and Higher Education*, *10* (3), 157–172.

Garrison, D.R., & Cleveland-Innes, M. (2005). Facilitating cognitive presence in online learning: Interaction is not enough. *American Journal of Distance Education*, *19* (3), 133–148.

Garrison, D.R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *Internet and Higher Education, 2* (2-3), 87-105.

Garrison, D.R., Anderson, T., & Archer, W. (2001). Critical and computer conferencing: A model and tool to asses cognitive presence. *American Journal of Distance Education*, *15* (1), 7-23.

Garrison, D.R., Cleveland-Innes, M., & Fung, T. (2004). Student role adjustment in online communities of inquiry: Model and instrument validation. *Journal of Asynchronous Learning Networks*, *8* (2), 61-74.

Garrison, D.R., Cleveland-Innes, M., & Fung, T.S. (2010). Exploring causal relationships among teaching, cognitive and social presence: Student perceptions of the community of inquiry framework. *Internet and Higher Education, 13*, 31-35.

Gettinger, M., & Walter, M. J. (2012). Classroom strategies to enhance academic engaged time. In S. L. Christenson, A. L. Reschly & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 653–673). New York, NY: Springer.

Gibson, W. (2009). Negotiating textual talk: conversation analysis, pedagogy and the organization of online asynchronous discourse. *British Educational Research Journal*, *35*(5), 705-721.

Glenn, J.M. (2000). Teaching the net generation. *Business Education Forum*, *54*(3), 6-14.

Gomes, A.K., & Pimentel, M.d.G.C. (2011). Measuring synchronous and asynchronous sharing of collaborative annotations sessions on ubi-videos as social interactions. 2011 Fourth International Conference on Ubi-Media Computing, (pp. 122-129). Sao Paulo.

Greenhow, C., & Robelia, B. (2009). Old communication, new literacies: Social network sites as social learning resources. *Journal of Computer-Mediated Communication*, *14*(4), 1130–1161.

Guichon, N., & Wigham, C.R. (2016). A semiotic perspective on webconferencing-supported language teaching. *ReCALL, 28* (1), 62-82.

Hall, R. (2008). The impact of the read/write web on learner agency. *E-learning*, *5*(3), 284-296.

Hampel, R. & Hauck, M. (2004). Towards an effective use of audio conferencing in distance language courses. *Language Learning & Technology*, *8*(1), 66-82.

Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. New York, NY: Routledge

Heift, T. (2004). Corrective feedback and learner uptake in CALL. *ReCALL, 16* (2), 416-431.

Helme, S., & Clarke, D. (2001). Identifying cognitive engagement in the mathematics classroom. *Mathematics Education Research Journal*, *13* (2), 133–153.

Henry, M., Carrol, F., Cunliffe, D., & Kop, R. (2018). Learning a minority language through authentic conversation using an online social learning method. *Computer Assisted Language Learning, 31* (4), 321-345.

Herring, S. (Ed.). (1996). *Computer-mediated communication: Linguistic, social and cross-cultural perspectives.* Amsterdam: John Benjamins.

Higgins, E.T. (1987). Self-discrepancy: A Theory relating self and affect. *Psychological Review*, *94* (3), 319-340.

Hiltz, S.R., & Shea, P. (2004). The student in the online classroom. In S.R. Hiltz & R. Goldman (Eds.), *Learning together online: Research on asynchronous learning networks* (pp. 145-169). Mahwah, NJ: Lawrence Erlbaum Associates.

Hollins-Alexander, S. (2013). *Online professional development through virtual learning communities.* Thousand Oaks, CA: Corwin.

Horst, M., Cobb, T., & Nicolae, I. (2005). Expanding academic vocabulary with a collaborative on-line database. *Language Learning & Technology, 9* (2), 90–110.

Hoskins, B., & Crick, R. D. (2010). Competences for learning to learn and active citizenship: Different currencies or two sides of the same coin? *European Journal of Education*, *45*(1), 121–137.

Hu, D., Wang, Y., & Chen, C. (2017). Ubiquitous Learning: Information Technology Driving Learning Revolution. In ICEMT' 17, *Proceedings of the 2017 International Conference on Education and Multimedia Technology*, (pp 21–26). Singapore.

Huang, Y-M., Huang, Y-M., Huang, S-H., & Lin, Y-T. (2012). A ubiquitous English vocabulary learning system: Evidence of active/ passive attitudes vs. usefulness/ ease-of-use. *Computers & Education*, *58*(1), 273–282.

Hubbard, P., & Romeo, K. (2012). Diversity in learner training. In G. Stockwell (Ed.), *Computer-assisted language learning: Diversity in research and practice* (pp. 33–48). Cambridge: Cambridge University Press.

Inman, S. (2011). Developing communities of learners. *Curriculum Journal*, *22* (4), 469–483

Iwasaki, S., Bartlett, M., Manns, H., & Willoughby, L. (2018, in press). The challenges of multimodality and multi-sensoriality: Methodological issues in analysing tactile signed interaction, Journal of Pragmatics. https://doi.org/10.1016/j.pragma.2018.05.003

Janssen, K., O'Connor, J., & Phillipson, S. (2018). Groups in action: A closer look at how students respond to group work. In M. Barnes, M. Gindidis & S. Phillipson (Eds.), *Evidence-based learning and teaching: A look into Australian classrooms* (pp. 138-154). Abington: Routledge.

Jones, V., & Jo. H.J. (2004). Ubiquitous learning environment: An adaptive teaching system using ubiquitous technology. In R. Atkinson, C. McBeath, D. Jonas-Dwyer & R. Phillips (Eds), *Proceedings of the 21st ASCILITE Conference* (pp. xxx-xxx). Perth, Australia.

Kanno, Y., & Norton, B. (2003). Imagined communities and educational possibilities: Introduction. *Journal of Language, Identity & Education*, 2(4), 241-249.

Ke, F. (2010). Examining online teaching, cognitive, and social presence for adult students. *Computers & Education*, *55* (2), 808-820.

Kenning, M. M. (2010). Differences that make the difference: A study of functionalities in synchronous CMC. *ReCALL*, *22*, 3-19.

Kessler, G. (2013). Collaborative language learning in co-constructed participatory culture. *CALICO Journal*, *30* (3), 307-322.

Kim, D., Rueckert, D., Kim, D.-J., & Seo, D. (2013). Students' perceptions and experiences of mobile learning. *Language Learning & Technology, 17*(3), 52–73.

King, K. P. (2002). Identifying success in online teacher education and professional development. *Internet and Higher Education*, *5* (3), 231–246.

Kinshuk. (2015). Roadmap for adaptive and personalized learning in ubiquitous environments. In Kinshuk & R. Huang (Eds.), *Ubiquitous learning environments and technologies*, (pp. 1–13). Heidelberg: Springer.

Klimanova, L., & Dembovskaya, S. (2013). L2 Identity, discourse, and social networking in Russian. *Language Learning & Technology*, *17* (1), 69–88.

Knight, J., Barbera, E., & Appel, C. (2017). A framework for learner agency in online spoken interaction tasks. *ReCALL, 29* (3), 276–293.

Knobel, M., & Lankshear, C. (Eds.). (2017). *Researching new literacies: Design, theory, and data in sociocultural investigation*. Switzerland: Peter Lang.

Kop, R., Fournier, H. (2010). New dimensions of self-directed learning in an open-networked learning environment. *International Journal of Self-Directed Learning, 7* (2), 2-20.

Kormos, J., Thom, K. & Kata, C. (2011). Systems of goals, attitudes and self-related beliefs in second language learning motivation. A*pplied Linguistics*, *32* (5).

Kozlova, I., & Zundel, E. (2013. Synchronous online language teaching: strategies to support learner development. In C. Meskill (Ed.)., *Online teaching and learning: Sociocultural perspectives* (pp. 99–117). London: Bloomsbury Publishing.

Kukulska-Hulme, A., Lee, H., & Norris, L. (2017). Mobile learning revolution: Implications for language pedagogy. In C. A. Chapelle & S. Sauro (Eds.), *The handbook of technology*

and second language teaching and learning (pp. 217–233). Hoboken, NJ: Wiley Blackwell.

Kupczynski, L., Ice, P., Weisenmayer, R., & McCluskey, F. (2010). Student perceptions of the relationship between indicators of teaching presence and success in online courses. *Journal of Interactive Online Learning*, *9*(1), 23-43.

Lai, C., & Li, G. (2011). Technology and task-based language teaching: A critical review. *CALICO Journal, 28* (2), 498-521.

Lai, C., Yeung, Y., & Hu, J. (2016). University student and teacher perceptions of teacher roles in promoting autonomous language learning with technology outside the classroom, *Computer Assisted Language Learning, 29* (4), 703-723.

Lally, V., Sharples, M., Tracy, F., Bertram, N., & Masters, S. (2012). Researching the ethical dimensions of mobile, ubiquitous and immersive technology enhanced learning (MUITEL): a thematic review and dialogue. *Interactive Learning Environments*, *20*(3), 217–238.

Lam, W. S. E. (2000). Second language literacy and the design of the self: A case study of a teenager writing on the Internet. *TESOL Quarterly*, *34*, 457–482.

Lamb, M. (2018). When motivation research motivates: issues in long-term empirical investigations. *Innovation in Language Learning and Teaching*, *12* (4), 357–370.

Lamy, M. N. (2004). Oral conversations online: Redefining oral competence in synchronous environments. *ReCALL*, *16*(2), 520–538.

Lamy, M. N. (2006). Multimodality in second language conversations online: Looking for a methodology. *In Proceedings of Third International Conference on Multimodality*. Pavia, Italy.

Lamy, M. N., & Hampel, R. (2007). Online communication in language learning and teaching. Basingstoke: Palgrave Macmillan.

Lamy, M.N., & Zourou, K. (2013). *Social networking for language education.* Basingstoke: Palgrave Macmillan.

Lankshear, C., & Knobel, M. (2017). Researching new literacies: Addressing the challenges of initial research training. In M. Knobel & C. Lankshear (Eds.), *Researching new literacies: Design, theory, and data in sociocultural investigation* (pp. 1-16). New York: Peter Lang.

Lantolf, J. P., & Thorne, J. P. (2006). *Sociocultural theory and the genesis of second language development.* Oxford: Oxford University Press.

Lantolf, J.P. (Ed.). (2000). *Sociocultural theory and second language learning*. Oxford: Oxford University Press.

Lantolf, J.P., & Thorne, S.L. (2006). *Sociocultural theory and the genesis of second language development.* Oxford: Oxford University Press.

Larose, R., Kim, J., & Peng, W. (2011). Social networking: addictive, compulsive, problematic, or just another media habit. In Z. Papacharissi (Ed), *A networked self: identity, community, and culture on social network sites* (pp. xxx-xxx). New York: Routledge.

Larsen-Freeman, D., & Cameron, L. (2008). *Complex systems and applied linguistics.* Oxford: Oxford University Press.

Laurie, S.P, Snyder, M.M., & Terrell, S.R. (2010). Facilitating discourse and enhancing teaching presence: Using mini audio presentations in online forums. *The Internet and Higher Education*, *13*(1–2), 75-77.

Laverick, E.K. (2018). Building a community of learners in and outside the classroom. *Journal of International Students*, *8* (2), 1256-1263

Lee, J.Y., Hong, N., Kim, S., Oh, J., & Lee, J. (2016). Smiley face: why we use emoticon stickers in mobile messaging. In MobileHCI '16, *Proceedings of the 18th International Conference on Human-Computer Interaction with Mobile Devices and Services Adjunct* (pp. 760-766). Florence, Italy.

Lee, L. (2002). Enhancing learners' communication skills through synchronous electronic interaction and task-based instruction. *Foreign Language Annals*, *35* (1), 16–24.

Lee, S.M. (2014). The relationships between higher order thinking skills, cognitive density, and social presence in online learning. *Internet and Higher Education, 21*, 41-52.

Levy, M., & Stockwell, G. (2006). *CALL dimensions: Options & issues in computer-assisted language learning.* Mahwah, NJ: Lawrence Erlbaum Associates.

Levy, M. (2009). Technologies in use for second language learning. *The Modern Language Journal*, *93*(Focus Issue), 769–782.

Li, Q. (2014). Differences in the motivation of Chinese learners of English in a foreign and second language context. *System*, *42*, 451–461.

Lim, C. P. & Cheah, P. T. (2003) The role of the tutor in asynchronous discussion boards: a case study of a pre-service teacher course, *Education Media International*, *40*(1/2), 33–47.

Lin, C.H., Warschauer, M., & Blake, R. (2016). Language learning through social networks: Perceptions and reality. *Language Learning & Technology, 20* (1), 124–147.

Little, D., Dam, L., & Legenhausen, L. (2017). *Language learner autonomy: Theory, practice and research.* Bristol: Multilingual Matters.

Liu, G. Z., Chen, J. Y., & Hwang, G. J. (2018). Mobile-based collaborative learning in the fitness center: A case study on the development of English listening comprehension with a context-aware application. *British Journal of Educational Technology*, *49* (2), 305–320.

Liu, Q., & Chao, C. (2018). CALL from an ecological perspective: How a teacher perceives affordance and fosters learner agency in a technology-mediated language classroom. *ReCALL*, *30*(1), 68-87.

Liu, S.H.J. (2017). Text-based negotiated interaction of NNS-NNS and NNS-NS dyads on Facebook. *ReCALL, 29* (3), 294-312.

Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*. Englewood Cliffs, NJ, US: Prentice-Hall, Inc.

Locke, E. A., & Latham, G. P. (2006). New directions in goal-setting theory. *Current Directions in Psychological Science, 15*(5), 265–268. https://doi.org/10.1111/j.1467-8721.2006.00449.x

Lomicka, L., & Lord, G. (2016). Social networking and language learning. In F. Farr & L. Murray (Eds.), *The Routledge handbook of language learning & technology* (pp. 255-268). Abingdon, UK: Routledge.

Loncke, F.T., Campbell, J., England, A.M., & Haley, T. (2006). Multimodality: a basis for augmentative and alternative communication–psycholinguistic, cognitive, and clinical/educational aspects. *Disability and Rehabilitation*, *28*(3), 169–174.

Loyens, S.M.M., Magda, J., Rikers, R.M.J.P. (2008). Self-directed learning in problem-based learning and its relationships with self-regulated learning. *Educational Psychology Review*, *20* (4), 411–427.

MacIntyre, P.D. (2002). Motivation, anxiety and emotion in second language acquisition. In P. Robinson (Ed.), *Individual differences in second language acquisition* (pp. 45–68). Amsterdam: John Benjamins.

Mair, J. (2016). Empowering and transforming a community of learners via a student-centered approach to campus dialogue and deliberation. *New Directions for Community Colleges*, *173*, 111-119.

McCabe, J. (2011). Metacognitive awareness of learning strategies in undergraduates. *Memory Cognition*, *39*, 462–476.

McConnell, D. (2006). *E-learning groups and communities*. Milton Keynes: Open University Press.

McCormack, J., & Smith-Tamaray, M. (2018). Collaboration in the classroom. In M. Barnes, M. Gindidis & S. Phillipson (Eds.), *Evidence-based learning and teaching: A look into Australian classrooms* (pp. 217–228). Abington: Routledge.

Meinel, C., & Schweiger, S. (2016). A virtual social learner community-constructive element of MOOCs. *Education Sciences*, *6* (3), 22.

Mercer, S. (2011). Understanding learner agency as a complex dynamic system. *System*, *39*(4), 427-436.

Merchie, E., & Keer, H.V. (2016). Mind mapping as a meta-learning strategy: Stimulating pre-adolescents' text-learning strategies and performance?. *Contemporary Educational Psychology, 46*, 128-147.

Mercieca, B. (2017). What is a community of practice? In J. McDonald & A. Cater-Steel (Eds.), *Communities of practice: Facilitating social learning in higher education* (pp. 3-26). Singapore: Springer.

Meskill, C. (Ed.). (2013). *Online teaching and learning: Sociocultural perspectives.* London: Bloomsbury Publishing.

Meskill, C., & Anthony, N. (2010). *Teaching language online*. Bristol: Multilingual Matters.

Mills, K. A. (2010). A review of the "digital turn" in the new literacy studies. *Review of Educational Research*, *80*(2), 246–271.

Mills, N. (2011). Situated learning through social networking communities: The development of joint enterprise, mutual engagement, and a shared repertoire. *CALICO Journal*, *28* (2), 345-368.

Moore, M. G. (1972). Learner autonomy: The second dimension of independent learning. *Convergence: An International Journal of Adult Education*, *5* (2), 76-87.

Morueta, R.T., López, P.M., Gómez, A.H., & Harris, V.W. (2016). Exploring social and cognitive presences in communities of inquiry to perform higher cognitive tasks. *Internet and Higher Education, 31*, 122-131.

Murray, G. (Ed.). (2014). *Social dimensions of autonomy in language learning.* Basingstoke: Palgrave Macmillan.

Murray, G., Gao, X., & Lamb, T. (Eds.). (2011). *Identity, motivation and autonomy in language learning.* Bristol: Multilingual Matters.

Niño, A. (2009). Machine translation in foreign language learning: Language learners' and tutors' perceptions of its advantages and disadvantages. *ReCALL, 21* (2), 241-258.

Noble, J., & Green, L. (2009). Synchronous asynchronicity: The use of mobiles to pattern face-to-face encounters in chaotic environments. *Australian Journal of Communication, 36*(1), 1-10.

Norton, B. (2000). *Identity and language learning: Gender, ethnicity and educational change*. Harlow: Longman.

Norton, B., & Kamal, F. (2003). The imagined communities of English language learners in a Pakistani school. *Journal of Language, Identity, and Education, 2* (4), 301-317.

Norton, B., & Toohey, K. (2011). Identity, language learning, and social change. *Language Teaching,44*(4), 412-446.

Nunan, D. (1999). *Second language teaching and learning*. Boston, MA: Heinle & Heinle Publishers.

Obar, J.A., & Oeldorf-Hirsch, A. (2018). The biggest lie on the Internet: Ignoring the privacy policies and terms of service policies of social networking services. *Information, Community & Society*. Advance online publication. https://doi.org/10.1080/1369118X.2018.1486870

Ogata, H., & Yano, Y. (2004). Context-ware support for computer-supported ubiquitous learning. *Proceedings of the 2nd IEEE International Workshop on Wireless and Mobile Technologies in Education* (pp. 27-34). Jung Li, Taiwan: IEEE.

Ogata, H., Hou, B., Li, M., Uosaki, N., Mouri, K., & Liu, S. (2014). Ubiquitous learning project using life-logging technology in Japan. *Educational Technology & Society*, *17*(2), 85–100.

O'Malley, C., Anderson, A. H., & Bruce, V. (1996). Comparison of face-to-face and video-mediated interaction. *Interacting with Computers*, *8*, 177–192.

Ortiz, J., Chih, W.H., & Tsai, F.S. (2018). Information privacy, consumer alienation, and lurking behavior in social networking sites. *Computers in Human Behavior, 80*, 143-157.

Oyserman, D., Terry, K., & Bybee, D. (2002). A possible selves intervention to enhance school involvement. *Journal of Adolescence*, *25*, 313–326.

Pargman, T.C., Nouri, J., & Milrad, M. (2018). Taking an instrumental genesis lens: new insights into collaborative mobile learning. *British Journal of Education Technology*, *46* (2), 219–234.

Pavelenko, A., & Norton, B. (2007). Imagined communities, identity, and English language learning. In J. Cummins & C. Davison (Eds.), *International handbook of English language teaching* (pp. 669–680). Dordrecht: Springer.

Peeters, W. (2018). Applying the networking power of Web 2.0 to the foreign language classroom: A taxonomy of the online peer interaction process. *Computer Assisted Language Learning*. Advance online publication. https://doi.org/10.1080/09588221.2018.1465982

Pegrum, M. (2014). *Mobile learning: Languages, literacies and cultures.* Basingstoke: Palgrave Macmillan.

Petersen, S.A., Divitini, M., & Chabert, G. (2008). Identity, sense of community and connectedness in a community of mobile learners. *ReCALL, 20*(3), 361-379.

Philp, J., & Duchesne, S. (2016). Exploring engagement in tasks in the language classroom. *Annual Review of Applied Linguistics, 36*, 50-72.

Philp, J., & Duchesne, S. (2008). When the gate opens: The interaction between social and linguistic goals in child second language development. In J. Philp, R. Oliver & A. Mackey (Eds.), *Child's play? Second language acquisition and the young learner* (pp. 83–104). Amsterdam, The Netherlands: John Benjamins.

Potter, J. (2012). *Digital media and learner identity: The new curatorship.* Basingstoke: Palgrave Macmillan.

Prosser, M., & Trigwell, K. (1999). Relational perspectives on higher education teaching and learning in the sciences. *Studies in Science Education*, *33* (1), 31–60.

Rachamim, M., & Orland-Barak, L. (2016). Constructing meaning in a community of learners: the 'star' pattern of talk. *Oxford Review of Education*, *42* (4), 475–490.

Ramsden, P. (1991). A performance indicator of teaching quality in higher education: The course experience questionnaire. *Studies in Higher Education*, *16* (2), 129–150.

Ramsden, P. (2003). *Learning to teach in higher education* (2nd ed.). New York: Routledge.

Ranker, J. (2017). The role of signifier differences, associations, and combinations in creative digital video composing: making meaning with gestures, objects, actions, and speech. *Pedagogies: An International Journal*, *12*(2), 196-218.

Reeve, J. (2012). A self-determination theory perspective on student engagement. In S.L. Christenson, A.L. Reschly & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 149–172). New York, NY: Springer

Reinders, H., & Hubbard, P. (2013). CALL and learner autonomy: Affordances and constraints. In M. Thomas, H. Reinders & M. Warschauer (Eds.), *Contemporary computer assisted language learning* (pp. 359–375). London: Continuum Books.

Reinhardt, J., & Chen, H.-I. (2013). An ecological development of social networking site-mediated identity development. In M.-N. Lamy & K. Zourou (Eds.), *Social networking for language education* (pp. 11–30). Basingstoke: Palgrave Macmillan.

Rennie, F., & Morrison, T. (2013). *e-Learning and social networking handbook: Resources for higher education* (2nd ed.). New York: Routledge.

Rennie, F., & Morrison, T. (2013). *e-Learning and social networking handbook: Resources for higher education* (2nd ed.). New York: Routledge.

Rogoff, B. (1994). Developing understanding of the idea of communities of learners. *Mind, Culture, and Activity*, *1* (4), 209–229.

Rubio, F., Thomas, J.M., & Li, Q. (2018). The role of teaching presence and student participation in Spanish blended courses. *Computer Assisted Language Learning*, *31*(3), 226–250.

Ruvolo, A.P., & Markus, H.R. (1992). Possible selves and performance: the power of self-relevant imagery. *Social cognition*, *10* (1), 95–124.

Salmon, G. (2011). *E-moderating: The key to online teaching and learning* (3rd ed.). New York: Routledge.

Samuelowics, K. & Bain, J. (1992). Conceptions of teaching held by teachers. *Higher Education*, *24*, 93–112.

Savvidou, C. (2013). Thanks for sharing your story: the role of the teacher in facilitating social presence in online discussion. *Technology, Pedagogy and Education*, 22(2), 193-211, DOI: 10.1080/1475939X.2013.787267

Schrage, M. (1995). No more teams!: Mastering the dynamics of creative collaboration. New York: Currency Doubleday.

Schröder, T., Hoey, J., & Rogers, K. B. (2016). Modeling dynamic identities and uncertainty in social interactions: Bayesian affect control theory. *American Sociological Review*, *81*(4), 828–855.

Schweinhorst, K. (2012). *Learner autonomy and CALL environments.* New York: Routledge.

Sewell, A., George, A.S., & Cullen, J. (2013). The distinctive features of joint participation in a community of learners. *Teaching and Teacher Education*, *31*, 46-55

Sharle, A., & Szarbo, A. (2000). *Learner autonomy: A guide to developing learner responsibility.* Cambridge: Cambridge University Press.

Sharples, M., & Pea, R. (2014). Mobile learning. In R.K. Sawyer (Ed.), *The Cambridge handbook of the learning sciences* (2nd ed.), (pp. 501-521). New York: Cambridge University.

Shea, P., & Bidjerano, T. (2008). Measures of quality in online education: An investigation of the community of inquiry model and the net generation. *Journal of Educational Computing Research*, *39*(4), 339–361.

Shea, P., & Bidjerano, T. (2009a). Cognitive presence and online learner engagement: A cluster analysis of the community of inquiry framework. *Journal of Computing in Higher Education*, *21*, 199–217.

Shea, P., & Bidjerano, T. (2009b). Community of inquiry as a theoretical framework to foster "epistemic engagement" and "cognitive presence" in online education. *Computers & Education*, *52*, 543–553.

Shea, P., & Bidjerano, T. (2010). Learning presence: Towards a theory of self-efficacy, self-regulation, and the development of a communities of inquiry in online and blended learning environments. *Computers & Education*, *55*(4), 1721–1731.

Shi, L., & Stickler, U. (2018). Interaction patterns in synchronous Chinese tutorials. *Innovation in Language Learning and Teaching, 12*(1), 6–23.

Skinner, E. A., & Pitzer, J. R. (2012). Developmental dynamics of engagement, coping, and everyday resilience. In S. L. Christenson, A. L. Reschly & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 21–44). New York: Springer.

Skinner, E. A., Kindermann, T. A., & Furrer, C. (2009). A motivational perspective on engagement and disaffection: Conceptualization and assessment of children's behavioral

and emotional participation in academic activities in the classroom. *Educational and Psychological Measurement*, *69*, 493–525.

Smith, L.G.E., Thomas, E.F., & McGarty, C. (2015). We must be the change we want to see in the world: Integrating norms and identities through social interaction. *Political Psychology*, *36*(5), 543-557.

Smith, S.U., & Mehta, R. (2013). The educational value of student talk in online discussion. In C. Meskill (Ed.), *Online teaching and learning: Sociocultural perspectives* (pp. 119-137). London: Bloomsbury.

Song, L., Singleton, E. S., Hill, J. R., & Koh, M. H. (2004). Improving online learning: Student perceptions of useful and challenging characteristics. *Internet & Higher Education*, *7*(1), 59-70.

Sotillo, S.M. (2000). Discourse functions and syntactics complexity synchronous and asynchronous communication. *Language Learning & Technology*, *4*(1), 77–110.

Stapleton, S.R. (2015). Environmental identity development through social interactions, action, and recognition. *The Journal of Environmental Education*, *46*(2), 94–113.

Stewart, A., & Irie, K. (2012). Realizing autonomy: Contradictions in practice and context. In K. Irie & A. Stewart (Eds.), *Realizing autonomy: Practice and reflection in language education contexts* (pp. 1–17). Basingstoke: Palgrave Macmillan.

Stockwell, G. (2010). Using mobile phones for vocabulary activities: Examining the effect of the platform. *Language Learning & Technology, 14*(2), 95–110.

Stockwell, G. (2012a). Introduction. In G. Stockwell (Ed.), *Computer assisted language learning: Diversity in research and practice* (pp. 1–13). Cambridge: Cambridge University Press.

Stockwell, G. (2012b). Working with constraints in mobile learning: A response to Ballance. *Language Learning & Technology, 16*(3), 24–31.

Stockwell, G. (2013). Technology and motivation in English language teaching. In E. Ushioda (Ed.), International perspectives on motivation (pp. 156–175). Basinger: Palgrave Macmillan.

Stockwell, G., & Hubbard, P. (2013). Some emerging principles for mobile-assisted language learning. *TIRF Report, 2013*, 1–14.

Stockwell, G., & Hubbard, P. (2014). Learner training in mobile language learning. In J. Colpaert, A. Aerts & M. Oberhofer (Eds.), *Proceedings of the Sixteenth International CALL Research Conference: Research Challenges in CALL* (pp. 320–322). Antwerp: University of Antwerp.

Stockwell, G., & Tanaka-Ellis, N. (2012). Diversity in language learning environments. In G. Stockwell (Ed.), *Computer-assisted language learning: Diversity in research and practice* (pp. 71–89). Cambridge: Cambridge University Press.

Stockwell. G. (2016). Mobile language learning. In F. Farr & L. Murray (Eds), *Routledge Handbook of Technology in Second Language Learning* (pp. 296–307). New York: Taylor & Francis.

Storch, N. (2002). Patterns of interaction in ESL pair work. *Language Learning*, *52* (1), 119–158.

Sun, Y., & Chang, Y. (2012). Blogging to learn: Becoming EFL academic writers through collaborative dialogues. *Language Learning & Technology*, *16* (1), 43–61.

Sun, Z., Lin, C. H., Wu, M., Zhou, J., & Luo, L. (2018). A tale of two communication tools: discussion-forum and mobile instant-messaging apps in collaborative learning. *British Journal of Educational Technology*, *49* (2), 248–261.

Svalberg, A. (2012). Thinking allowed: Language awareness in language learning and teaching: A research agenda. *Language Teaching*, *45*(3),376–388.

Swain, C. (2006). Preservice teachers self-assessment using technology: Determining what is worthwhile and looking for changes in daily teaching and learning tractices. *Journal of Technology and Teacher Education, 14* (1), 29-59.

Swain, M. (2000). The output hypothesis and beyond: mediating acquisition through collaborative dialogue. In J.P. Lantolf (Ed.), *Sociocultural theory and second language learning*, (pp. 97-114). Oxford: Oxford University Press.

Swan, K. (2003). Learning effectiveness online: What the research tells us. *Elements of Quality Online Education, Practices and Direction, 4*, 13-47.

Swan, K., & Shea, P. (2004). The development of virtual learner communities. In S. R. Hiltz & R. Goldman (Eds.), *Learning together online: Research on asynchronous learning networks* (pp. 239-260). Mahwah, NJ: Lawrence Erlbaum Associates.

Takahashi, T. (2014). Always on and connected: Young people and their mobile social media use in Japan, the US, and the UK. Paper presented at the Japan Foundation London. Retrieved from https://www.academia.edu/11702967/Always_on_and_Connected_young_people_and_their_mobile_social_media_use_in_Japan_the_US_and_the_UK

Tan, S., O'Halloran, K., & Wignell, P. (2016). Multimodal research: Addressing the complexity of multimodal environments and the challenges for CALL. *ReCALL, 28*(3), 253–273.

Tanaka, H., Sakti, S., Neubig, G., Toda, T., & Nakamura, S. (2015). NOCOA+: Multimodal computer-based training for social communications. *IEICE Transaction on Information & Systems*, *E98-D*(8), 1536–1544.

Tatiana Dina, A., & Ileana Ciornei, S. (2013). The advantages and disadvantages of computer assisted language learning and teaching for foreign languages. *Procedia - Social and Behavioral Sciences*, *76*, 248–252.

Thorne, S., Black, R., & Sykes, J. (2009). Second language use, socialization, and learning in Internet interest communities and online gaming. *Modern Language Journal*, *93* (s1), 802–821.

Torras, M.E., & Mayordomo, R. (2011). Teaching presence and regulation in an electronic portfolio. *Computers in Human Behavior*, *27*(6), 2284-2291.

Tran, P. (2015). Integrating learner training into task design of vocabulary activities on mobile phones. In J. Colpaert, A. Aerts, M. Oberhofer & M. Gutierez-Colon Plana (Eds.), *Proceedings of the Seventeenth International CALL Research Conference: Task Design and CALL* (pp. 457–459). Antwerp: University of Antwerp.

Tran, P. (2016). Training learners to use Quizlet vocabulary activities on mobile phones in Vietnam. *The JALT CALL Journal, 12*(1), 43–56.

Tudini, V. (2010). *Online second language acquisition: Conversation analysis of online chat*. London: Continuum.

Turula, A. (2017). Teaching presence in telecollaboration. Keeping an open mind. *System*, *64*, 21-33.

Ushioda, E. (2011). Language learning motivation, self and identity: current theoretical perspectives. *Computer Assisted Language Learning, 24*(3), 199-¥–210.

Valkenburg, P.M., & Peter, J. (2011). Online communication among adolescents: An integrated model of its attraction, opportunities, and risks. *Journal of Adolescent Health*, *48*(2), 121–127.

Van den Branden, K. (2016). The Role of Teachers in Task-Based Language Education. *Annual Review of Applied Linguistics*, *36*, 164–181.

Van Lier, L. (2004). *The ecology and semiotics of language learning: A sociocultural perspective*. Boston: Kluwer Academic.

Van Lier, L. (2010). The ecology of language learning: Practice to theory, theory to practice. *Procedia Social and Behavioral Sciences*, *3*, 2–6.

Vandergriff, I. (2016). *Second-language discourse in the digital world: Linguistic and social practices in and beyond the networked classroom*. Amsterdam: John Benjamins.

Varli, O. (2013). An exploration of 3D virtual worlds through ESL/EFL teachers' perspectives in second life. In C. Meskill (Ed.), *Online teaching and learning: Sociocultural perspectives* (pp. 61-76). London: Bloomsbury Publishing.

Venkatesh, V., Morris, M., Davis, G., & Davis, F. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly, 27*(3), 425-478. doi:10.2307/30036540

Vermunt, J.D., & Vermetten, Y.J. (2004). Patterns in student learning: Relationships between learning strategies, conceptions of learning, and learning orientations. *Educational Psychology Review,16* (4), 359–384.

Verplanken, B., & Orbell, S. (2003). Reflections on past behavior: a self-report index of habit strength. *Journal of Applied Social Psychology*, *33*(6), 1313–1330.

Vetter, A., & Chanier, T. (2006). Supporting oral production for professional purpose in synchronous communication with heterogeneous learners. *ReCALL*, *18*, 5–23.

Vigliocco, G., Perniss, P., & Vinson, D. (2014). Language as a multimodal phenomenon: implications for language learning, processing and evolution. *Philosophical*

Transactions of the Royal Society B: Biological Sciences, *369*. DOI:https://doi.org/10.1098/rstb.2013.0292

Voss, W.G. (2017). European Union data privacy law reform: General data protection regulation, privacy shield, and the right to delisting. *The Business Lawyer, 72* (1), 221–233.

Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Wang, B. (2009). Motivation and language learning. *Asian Social Science*, *5*(1), 98–100.

Wasserman, S., & Faust, K. (1994). *Social network analysis*. Cambridge: Cambridge University Press.

Wastiau, P., Blamire, R., Kearney, C., Quittre, V., Van de Gaer, E., & Monseur, C. (2013). The use of ICT in education: A survey of schools in Europe. *European Journal of Education*, *48*, 11–27.

Watanabe, Y., & Swain, M. (2007). Effects of proficiency differences and patterns of pair interaction on second language learning: collaborative dialogue between adult ESL learners. *Language Teaching Research*, *11*(2), 121–142.

Weinberger, D. (2012). *Too big to know*. New York: Basic Books.

Wenger, E., McDermott, R., & Snyder, W. (2002). *Cultivating communities of practice.* Harvard, MA: Harvard Business School Publishing.

Wisneski, J.E., Ozogul, G., & Bichelmeyer, B.A. (2015). Does teaching presence transfer between MBA teaching environments? A comparative investigation of instructional design practices associated with teaching presence. *The Internet and Higher Education*, *25*, 18–27.

Wood, W., Quinn, J. M., & Kashy, D. A. (2002). Habits in everyday life: Thought, emotion, and action. *Journal of Personality and Social Psychology, 83*(6), 1281–1297.

Wrigley, F. (2014, December 19). Japan's biggest online retailers now have more smartphone traffic than desktop site users. RocketNews24. Retrieved from http://en.rocketnews24.com/2014/12/19/japans-biggest-online-retailers-now-have-more-smartphone-traffic-than-desktop-site-users/

Yamada, M. (2009). The role of social presence in learner-centered communicative language learning using synchronous computer-mediated communication: An experimental study. *Computers and Education*, *52*, 820–833.

Yang, S.J.H. (2006). Context aware ubiquitous learning environments for peer-to-peer collaborative learning. *Journal of Education Technology & Society*, *9*(1), 188–201.

Yang, Y.-F., & Wu, S.-P. (2011). A collective case study of online interaction patterns in text revisions. *Educational Technology & Society*, *14*(2), 1–15.

Yazzie-Mintz, E., & McCormick, K. (2012). Finding the humanity in the data; Understanding, measuring and strengthening student engagement. In S. L. Christenson, A. L. Reschly & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 743–762). New York, NY: Springer.

Yim, S. and Warschauer, M. (2016). CALL and electronic media. In K. Hyland & P. Shaw (Eds.), *The Routledge handbook of English for academic purposes*, (pp. 592–607). London and New York: Routledge.

Yuan, J., & Kim, C. (2016). Guidelines for facilitating the development of learning communities in online courses. *Journal of Computer Assisted Learning, 30*, 220–232.

Yukselturk, E., & Bulut, S. (2007). Predictors for student success in an online course. *Educational Technology & Society*, *10* (2), 71-83.

Zajac, M. (2009). Using learning styles to personalize online learning. *Campus-Wide Information Systems*, *26* (3), 256-265.

Zapalska, A., & Brozik, D. (2006). Learning styles and online education. *Campus-Wide Information Systems, 23* (5), 325-335.

Appendix A. Pre Survey_English

1. Is your phone a smart phone? Y N

If yes, please write the brand (iPhone, Sony, Samsung, Huawei, etc.)

_____

2. How long do you plan to spend on the Quizlet vocabulary activities each week? Please circle the appropriate amount.

e. Not at all
f. Less than 30 minutes
g. 30 – 60 minutes
h. More than 60 minutes

Please give your reasons.

_____

_____

3. What do you think is good about using your mobile phone for language learning?

_____

_____

4. What did you think is bad about using your mobile phone for language learning?

_____

_____

5. If you had the chance, would you like to use your mobile phone for language learning in the future? Y N

Please give your reasons.

_____

_____

If yes, please describe what types of activities you'd like to do.

_____

_____

6. Have you ever downloaded any apps for language learning? Y N

If yes, please give details, including prices.

_____

_____

Do you use any of these apps continuously? Please give reasons.

_____

7. If you were to buy an app for language learning, how much would you be prepared to pay? Please circle the appropriate amount.

g. 0 yen
h. Less than 100 yen
i. Between 100 yen and 300 yen
j. Between 300 yen and 500 yen
k. Between 500 yen and 1000 yen
l. If necessary, more than 1,000 yen

8. What kind of language learning apps would you like to use? Please put the following in order of what you'd like to use. If you don't want to use something, please write "0".

a. __ Listening
b. __ Speaking
c. __ Reading
d. __ Writing
e. __ Vocabulary
f. __ Grammar
g. __ Other (_____)

9. Without the teacher's encouragement, will you do the Quizlet activities? Y N

Please give your reasons.

_____

_____

10. Will you add new English words you find to Quizlet for your own study? Y N

Please give your reasons.

_____

_____

11. Where do you plan to complete the Quizlet activities? Please put the following in order of where you'd like to do them. If you don't want to do them somewhere, please write "0".

a. ___Home
b. ___Classroom
c. ___Train, bus, etc.
d. ___Cafe, restaurant, etc.
e. ___Library
f. ___Somewhere else (_____)

Thank you for your time!

Appendix B. Pre Survey_Japanese

モーバイルラーニングに関するアンケート

1. お持ちの携帯電話はスマートフォンか。　　Y　　N

「Y」はいと答えた場合、メーカーを書いてください。（iPhone, Sony, Samsung, Huawei など）

_____

2. Quizlet の語彙学習にスマートフォンを一週間どれぐらい使う予定ですか。該当する答えを「○」してください。

i. 使う予定はない
j. ３０分未満
k. ３０分以上、６０分未満
l. ６０分以上

その理由を書いてください。

_____

_____

3. スマートフォンでの語学学習に関して、よいと思う点を書いてください。

_____

_____

4. スマートフォンでの語学学習に関して、よくないと思う点を書いてください。

_____

_____

5. これからは、機会があれば、スマートフォンで語学学習をしたいと思いますか。 Y　　N

その理由を書いてください。

_____

_____

「Y」と答えた場合、どのような学習をしたいのかを書いてください。

_____

_____

6. 語学学習のためのアプリをダウンロードしたことがありますか。　　Y　　N

「Y」と答えた場合、値段も含む詳細を書いてください。

_____

_____

このアプリを継続的に使いますか？理由も述べてください。

_____

7. もし語学学習のためのアプリをダウンロードすれば、いくらぐらいまでだったら払ってもいいと思いますか。該当する答えを「〇」してください。

m. ０円
n. １００円未満
o. １００円以上、３００円未満
p. ３００円以上、５００円未満
q. ５００円以上、１０００円未満
r. 必要だったら、１０００円以上

8. どのような語学学習のアプリを使いたいと思いますか。下記のリストに順番をつけてください。学習したくない場合、「0」を書いてください。

h. ___リスニング
i. ___スピーキング
j. ___リーディング
k. ___ライティング
l. ___語彙
m. ___文法
n. ___その他（_____）

9. 先生の助言なしで、Quizletの学習をすると思いますか。　　Y　　N

その理由を書いてください。

_____

_____

10. 新しく出会う英語の単語をQuizletに追加しますか。　　Y　　N

その理由を書いてください。

_____

_____

11. スマートフォンによる語学学習をどこでする予定ですか。下記のリストに順番をつけてください。使わなかった場合、「0」を書いてください。

g. ___自宅
h. ___教室
i. ___電車、バスなど
j. ___カフェ、レストランなど
k. ___図書館
l. ___その他（_____）

ご協力をどうもありがとうございました！

Appendix C. Survey on Mobile Learning

Part 1: Background Information

1. Is your phone a smart phone? Y N

   If yes, please write the brand (iPhone, Sony, Samsung, Huawei, etc.)

   _____

2. What do you think is good about using your mobile phone for language learning?

   _____

   _____

3. What did you think is bad about using your mobile phone for language learning?

   _____

   _____

4. If you had the chance, would you like to use your mobile phone for language learning in the future?
   Y N

   Please give your reasons.

   _____

   _____

   If yes, please describe what types of activities you'd like to do.

   _____

   _____

5. Have you ever downloaded any apps for language learning? Y N

If yes, please give details, including prices (if any).

_____

_____

Do you use any of these apps continuously? Please give reasons.

_____

6. If you were to buy an app for language learning, how much would you be prepared to pay? Please circle the appropriate amount.

s. 0 yen
t. Less than 100 yen
u. Between 100 yen and 300 yen
v. Between 300 yen and 500 yen
w. Between 500 yen and 1000 yen
x. If necessary, more than 1,000 yen

7. What kind of language learning apps would you like to use? Please put the following in order of what you'd like to use. If you don't want to use something, please write "0".

o. __ Listening
p. __ Speaking
q. __ Reading
r. __ Writing
s. __ Vocabulary
t. __ Grammar
u. __ Other （_____）

Part 2: Language Learning

8. Do you like studying English? Yes No

Please give your reasons.

_____

_____

9. How would you rate yourself for the following for English?

a.	Pronunciation	Bad	1	2	3	4	Good	
b.	Grammar		Bad	1	2	3	4	Good
c.	Vocabulary	Bad	1	2	3	4	Good	
d.	Listening		Bad	1	2	3	4	Good
e.	Speaking		Bad	1	2	3	4	Good
f.	Reading	Bad	1	2	3	4	Good	
g.	Writing	Bad	1	2	3	4	Good	

10. How do you study new vocabulary? Circle all that are appropriate.

a. Write it down
b. Remember the word
c. Listen to the word and repeat
d. Write it in a sentence
e. Study all the words in one time and review later
f. Study some words per day and review studied words before study new words
g. I don't know
h. Other: _____

11. How do you study listening? Circle all that are appropriate.

a. Listen to understand
b. Listen for pronunciation
c. Listen for new words
d. Listen for grammar
e. Listen for intonation
f. I don't know
g. Other: _____

12. What would you like to do with English? Circle all that are appropriate.

a. I want to watch foreign films
b. I want to listen to foreign songs
c. I want to travel
d. I want to get a better job
e. I want to make foreign friends
f. I have to get credits to graduate
g. Others: _____
h. I don't want to do anything with English.

13. How do you study English outside of class?

h. Just do what the teacher told
i. Listen or watch English websites to study
j. Read English books
k. Use the study apps to study
l. Talk to friends in English
m. Others: _____
n. I don't study outside of class

Part 3: Technological Aspects

14. How long did you plan to spend on the Quizlet vocabulary activities each week? Please circle the appropriate amount.

m. Not at all
n. Less than 30 minutes
o. 30 – 60 minutes
p. More than 60 minutes

Please give your reasons.

_____

_____

15. Without the teacher's encouragement, will you do the Quizlet activities? Y N

Please give your reasons.

_____

_____

16. Will you add new English words you find to Quizlet for your own study? Y N

Please give your reasons.

_____

_____

17. Where do you plan to complete the Quizlet activities? Please put the following in order of where you'd like to do them. If you don't want to do them somewhere, please write "0".

m. ___Home
n. ___Classroom
o. ___Train, bus, etc.
p. ___Cafe, restaurant, etc.
q. ___Library
r. ___Somewhere else (_____)

18. Do you know how to do the following with Quizlet?

a.	Create a study set		Y	N
b.	Flashcards		Y	N
c.	Learn	Y	N	
d.	Spell	Y	N	
e.	Test	Y	N	
f.	Match	Y	N	
g.	Gravity	Y	N	
h.	Live	Y	N	

19. Would you study through Quizlet or the listening without the teacher's reminders through LINE?

Y N

20. Do you think the teacher's encouragement through LINE helps you study English better?

Y N

21. How else do you think LINE can help you with your English?

_____

_____

22. Do you need more training to use Quizlet to study English? Y N

23. Do you need more training to study listening in English? Y N

Thank you for your cooperation!

Appendix D. Phase_2_Mobile Learning Survey_J

モーバイルラーニングに関するアンケート

Part 1: 背景情報

2. お持ちの携帯電話はスマートフォンか。　　Y　　N

「Y」はいと答えた場合、メーカーを書いてください。（iPhone, Sony, Samsung, Huawei など）

_____

2. スマートフォンでの語学学習に関して、よいと思う点を書いてください。

_____

_____

3. スマートフォンでの語学学習に関して、よくないと思う点を書いてください。

_____

_____

4. これからは、機会があれば、スマートフォンで語学学習をしたいと思いますか。 Y　　N

その理由を書いてください。

_____

_____

「Y」と答えた場合、どのような学習をしたいのかを書いてください。

_____

_____

5. 語学学習のためのアプリをダウンロードしたことがありますか。　　Y　　N

「Y」と答えた場合、無料のものを含む、値段も含む詳細を書いてください。

_____

_____

このアプリを継続的に使いますか？理由も述べてください。

_____

6. もし語学学習のためのアプリをダウンロードすれば、いくらぐらいまでだったら払ってもいいと思いますか。該当する答えを「〇」してください。

y.　０円
z.　１００円未満
aa. １００円以上、３００円未満
bb. ３００円以上、５００円未満
cc. ５００円以上、１０００円未満
dd. 必要だったら、１０００円以上

7. どのような語学学習のアプリを使いたいと思いますか。下記のリストに順番をつけてください。学習したくない場合、「0」を書いてください。

v.　___リスニング
w. ___スピーキング
x.　___リーディング
y.　___ライティング
z.　___語彙
aa. ___文法

bb. ___その他（_____）

Part 2: 語学学習

8. 英語の学習は好きですか?　　Y　　N

その理由を書いてください。

_____

_____

9. 自分の英語の能力をどのように評価します。それぞれの 1 ～ 4 の数字に「○」をつけてください。

h.	発音	苦手	1	2	3	4	得意
i.	文法	苦手	1	2	3	4	得意
j.	語彙	苦手	1	2	3	4	得意
k.	リスニング	苦手	1	2	3	4	得意
l.	スピーキング	苦手	1	2	3	4	得意
m.	リーディング	苦手	1	2	3	4	得意
n.	ライティング	苦手	1	2	3	4	得意

10. 新しい単語をどのように勉強しますか。該当するものすべてに「○」をつけてください。

i. 控えておく
j. 覚えておく
k. 聞いてから、繰り返して言う
l. 文章の中に書く
m. 知らない単語を一気に暗記してから、後で復習する
n. 毎日少しずつ新しい単語を覚えるが、以前勉強した単語を先に復讐すしてから覚える
o. わからない
p. その他: _____

11. リスニングをどのように勉強しますか。該当するものすべてに「○」をつけてください。

h. 意味を理解するために聴く
i. 発音に注目して聴く
j. 新しい単語に注目して聴く
k. 文法に注目して聴く
l. イントネーションに注目して聴く
m. わからない
n. その他: _____

12.英語を何に使いたいですか。 該当する答えのすべてに「○」をつけてください。

i. 外国の映画が見たい
j. 外国の音楽が聴きたい
k. 旅行したい
l. よりいい仕事に就きたい
m. 外国人の友達が作りたい
n. 卒業するために単位を取らなければならない
o. その他: _____
p. 英語を特に使いたくない

13. 授業以外にどのように英語を勉強しますか? 該当する答えのすべてに「○」をつけてください。

o. 先生が要求したことだけをする
p. 英語のウェブサイトを閲覧したり、聞いたりする
q. 英語の小説を読む
r. 英語学習のアプリを使う
s. 英語で友達と話をする
t. その他: _____
u. 授業以外は英語を勉強しない

Part 3: 技術面

2. Quizlet の語彙学習を、一週間どれぐらい使う予定ですか。

q. 使う予定はない
r. ３０分未満
s. ３０分以上、６０分未満
t. ６０分以上

その理由を書いてください。

_____

_____

15. 先生の助言なしでは、Quizlet の語学学習をすると思いますか。　　Y　　N

その理由を書いてください。

_____

_____

16. 自分の英語学習のために Quizlet に新しい単語を入れると思いますか。　　Y　　N

その理由を書いてください。

_____

_____

17. Quizlet の語学学習をどこでする予定ですか。下記のリストに順番をつけてください。使わなかった場合、「0」を書いてください。

s. ___自宅
t. ___教室
u. ___電車、バスなど
v. ___カフェ、レストランなど
w. ___図書館
x. ___その他（_____）

18. Quizlet を利用して、次はできますか?

i. 「Study set」を作成する　　Y　　N
j. 「Flashcards」を利用する　　Y　　N
k. 「Learn」を利用する　　Y　　N
l. 「Spell」を利用する　　Y　　N

m. 「Test」を利用する　　Y　　N
n. 「Match」を利用する　　Y　　N
o. 「Gravity」を利用する　　Y　　N
p. 「Live」を利用する　　Y　　N

19. LINE を通しての先生からの助言がなければ、Quizlet の語彙学習をすると思いますか。

Y　　N

20. LINE を通しての先生からの助言がなければ、リスニングの学習をすると思いますか。

Y　　N

21. LINE を通しての先生からの助言は英語の勉強の手助けになっていると思いますか。

Y　　N

22. 英語の学習のために、LINE の使い道がほかにあれば教えてください。

_____

_____

23. Quizlet をよりうまく使いこなせるために、説明がもっと必要だと思いますか。

Y　　N

24. リスニングをより効果的にできるために、説明がもっと必要だと思いますか。

Y　　N

ご協力をどうもありがとうございました！

Appendix E. General Attitude Survey_English

TASK EVALUATION QUESTIONNAIRE (Vocabulary and Listening TASK)

For each of the following statements, please indicate how true it is for you, using the following scale:

1 2 3 4 5 6 7
not at all true somewhat true very true

1. While I was working on the task I was thinking about how much I enjoyed it. 1 2 3 4 5 6 7
2. I did not feel at all nervous about doing the task. 1 2 3 4 5 6 7
3. I felt that it was my choice to do the task. 1 2 3 4 5 6 7
4. I think I am pretty good at this task. 1 2 3 4 5 6 7
5. I found the task very interesting. 1 2 3 4 5 6 7
6. I felt tense while doing the task. 1 2 3 4 5 6 7
7. I think I did pretty well at this activity, compared to other students. 1 2 3 4 5 6 7
8. Doing the task was fun. 1 2 3 4 5 6 7
9. I felt relaxed while doing the task. 1 2 3 4 5 6 7
10. I enjoyed doing the task very much. 1 2 3 4 5 6 7
11. I didn't really have a choice about doing the task. 1 2 3 4 5 6 7
12. I am satisfied with my performance at this task. 1 2 3 4 5 6 7
13. I was anxious while doing the task. 1 2 3 4 5 6 7
14. I thought the task was very boring. 1 2 3 4 5 6 7
15. I felt like I was doing what I wanted to do while I was working on the task. 1 2 3 4 5 6 7
16. I felt pretty skilled at this task. 1 2 3 4 5 6 7
17. I felt pressured while doing the task. 1 2 3 4 5 6 7
18. I felt like I had to do the task. 1 2 3 4 5 6 7
19. After working at this task for a while, I felt pretty competent. 1 2 3 4 5 6 7

Perceived Competence for Learning

Please respond to each of the following items in terms of how true it is for you with respect to your learning in this course. Use the scale:

1 2 3 4 5 6 7

not at all true somewhat true very true

1. I feel confident in my ability to learn English through listening. 1 2 3 4 5 6 7

2. I am capable of learning the material in this course. 1 2 3 4 5 6 7

3. I am able to achieve my goals in this course. 1 2 3 4 5 6 7

4. I feel able to meet the challenge of performing well in this course. 1 2 3 4 5 6 7

Reasons Learning Questionnaire

The following questions relate to your reasons for participating actively in the class. Different people have different reasons for participating in such a class, and we want to know how true each of these reasons is for you. There are three groups of items, and those in each group pertain to the sentence that begins that group. Please indicate how true each reason is for you using the following scale:

1 2 3 4 5 6 7

not at all true somewhat true very true

A. I will participate actively in the English classes:

1. Because I feel like it's a good way to improve my skills and my understanding of English. 1 2 3 4 5 6 7

2. Because others would think badly of me if I didn't. 1 2 3 4 5 6 7

3. Because I would feel proud of myself if I did well in the course. 1 2 3 4 5 6 7

4. Because learning English well is an important part of having a good job. 1 2 3 4 5 6 7

B. I am likely to follow my instructor's suggestions for studying English:

5. Because I would get a bad grade if I didn't do what the teacher suggests. 1 2 3 4 5 6 7

6. Because I am worried that I am not going to perform well in the course. 1 2 3 4 5 6 7

7. Because it's easier to follow the teacher's suggestions than come up with my own study strategies. 1 2 3 4 5 6 7

8. Because I believe my teacher's suggestions will help me study English effectively. 1 2 3 4 5 6 7

C**. The reason that I will continue to broaden my English skills is**:

11. Because it's interesting to learn about English. 1 2 3 4 5 6 7

12. Because it's a challenge to really understand how to communicate in English. 1 2 3 4 5 6 7

13. Because a good grade in English will look positive on my record. 1 2 3 4 5 6 7

14. Because I want others to see that I am intelligent. 1 2 3 4 5 6 7

Teacher ‘s presence

This questionnaire contains items that are related to your experience with your instructor in this class. Instructors have different styles in dealing with students, and we would like to know more about how you have felt about your encounters with your instructor. Your responses are confidential. Please be honest and candid.

1 2 3 4 5 6 7

Strongly disagree neutral strongly agree

1. I feel that my instructor provides me choices and options. 1 2 3 4 5 6 7

2. I feel understood by my instructor. 1 2 3 4 5 6 7

3. I am able to be open with my instructor during class. 1 2 3 4 5 6 7

4. My instructor conveyed confidence in my ability to do well in the course. 1 2 3 4 5 6 7

5. I feel that my instructor accepts me. 1 2 3 4 5 6 7

6. My instructor made sure I really understood the goals of the course and what I need to do. 1 2 3 4 5 6 7

7. My instructor encouraged me to ask questions. 1 2 3 4 5 6 7

8. I feel a lot of trust in my instructor. 1 2 3 4 5 6 7

9. My instructor answers my questions fully and carefully. 1 2 3 4 5 6 7

10. My instructor listens to how I would like to do things. 1 2 3 4 5 6 7

11. My instructor handles people's emotions very well. 1 2 3 4 5 6 7

12. I feel that my instructor cares about me as a person. 1 2 3 4 5 6 7

13. I don't feel very good about the way my instructor talks to me. 1 2 3 4 5 6 7

14. My instructor tries to understand how I see things before suggesting a new way to do things. 1 2 3 4 5 6 7

15. I feel able to share my feelings with my instructor. 1 2 3 4 5 6 7

Appendix F. General Attitude Survey_Japanese

タスク評価アンケート（語彙とリスニングのタスク）

次の項目は、下記の基準に基づいて自分にとってはどれくらい当てはまるかを記入してください。

1　2　3　4　5　6　7

そう思わない　　ややそう思う　本当にそう思う

1. このタスクをやりながら、楽しいと思った。　1 2 3 4 5 6 7
2. タスクをするにあたっては緊張しなかった。　1 2 3 4 5 6 7
3. タスクをするかどうかは自分で決められたと感じた。　1 2 3 4 5 6 7
4. タスクは上手にこなせたと思った。　1 2 3 4 5 6 7
5. タスクは面白かった。　1 2 3 4 5 6 7
6. タスクをやっているうちに、ストレスを感じた。　1 2 3 4 5 6 7
7. 他の学生より、タスクをよくこなせたと思う。　1 2 3 4 5 6 7
8. タスクは楽しかった。　1 2 3 4 5 6 7
9. リラックスした状態でタスクができた。　1 2 3 4 5 6 7
10. タスクは本当に面白かった。　1 2 3 4 5 6 7
11. タスクをせざるを得なかった。　1 2 3 4 5 6 7
12. タスクの出来栄えに満足した。　1 2 3 4 5 6 7
13. タスクをやるときは心配した。　1 2 3 4 5 6 7
14. タスクは本当につまらなかった。　1 2 3 4 5 6 7
15. タスクをやる時、やりたいことをやっていると感じた　1 2 3 4 5 6 7
16. タスクは上手にできると感じた。　1 2 3 4 5 6 7
17. タスクをしながら、プレシャーを感じた。　1 2 3 4 5 6 7
18. タスクをしないといけないと感じた。　1 2 3 4 5 6 7

19. タスクをしばらくしたら、上達したと感じた。　　1 2 3 4 5 6 7

学習能力に関する認識

この科目の学習について、次の項目は下記の基準に基づいてどれくらい当てはまるかを記入してください。

1　2　3　4　5　6　7

そう思わない　　ややそう思う　本当にそう思う

1. リスニングを通して、英語の勉強ができると感じた。　1 2 3 4 5 6 7

2. この科目の内容を学べると感じた。　1 2 3 4 5 6 7

3. この科目を通して、自分の目標が達成できると感じた。1 2 3 4 5 6 7

4. この科目でよくできるとの確信が持てた。　1 2 3 4 5 6 7

学習する理由

次の項目は、この科目に積極的に取り組む理由について問います。それぞれの学生は違う理由で授業に取り組むため、あなたにとってはその理由を探りたいと思っています。 項目は下記の基準に基づいて自分にとってはどれくらい当てはまるかを記入してください。

1　2　3　4　5　6　7

そう思わない　　ややそう思う　本当にそう思う

A. 英語の授業に積極的に取り組む理由

1. 英語のスキルを磨き、理解を深めることができる。　1 2 3 4 5 6 7

2. しなければ、周りの人は私を悪く思う。　1 2 3 4 5 6 7

3. この科目でよくできれば、嬉しく思う。　1 2 3 4 5 6 7

4. 良い仕事に就くために、英語が必要である。　1 2 3 4 5 6 7

B. 英語の勉強についての教員のアドバイスに従う理由

5. やらなければ、良い成績が取れない。　１ ２ ３ ４ ５ ６ ７

6. この科目ではよくできないのが心配である。　１ ２ ３ ４ ５ ６ ７

7. 自分で考えるより、先生の提案に従ったほうが楽である １ ２ ３ ４ ５ ６ ７

8. 先生の提案によって、英語を効果的に学習できる。　１ ２ ３ ４ ５ ６ ７

C. 英語を勉強し続けたい理由

11. 英語を勉強することが面白い。　１ ２ ３ ４ ５ ６ ７

12. 英語でのコミュニケーションはチャレンジである。　１ ２ ３ ４ ５ ６ ７

13. 成績表に、英語のいい成績があれば見た目がいい。　１ ２ ３ ４ ５ ６ ７

14. 周りの人に知的なイメージを見せたい。　１ ２ ３ ４ ５ ６ ７

教員の役割

下記の項目は、この科目における、教員に関する感想についてです。それぞれの教員は、学生に違うように接するため、この科目での経験について尋ねたいと思います。回答は極秘扱いされますので、正直に答えてください。項目は下記の基準に基づいて自分にとってはどれくらい当てはまるかを記入してください。

1　2　3　4　5　6　7

そう思わない　ややそう思う　本当にそう思う

1. 教員は、色々な選択肢を与えてくれた。　１ ２ ３ ４ ５ ６ ７

2. 教員は、私を理解してくれた。　１ ２ ３ ４ ５ ６ ７

3. 授業中に遠慮なく教員と話せる。　１ ２ ３ ４ ５ ６ ７

4. 教員は、私がうまく勉強できることを言ってくれた。　１ ２ ３ ４ ５ ６ ７

5. 教員は、私のことを受け入れてくれたように感じた。　１ ２ ３ ４ ５ ６ ７

6. 科目の目標と何をすれば良いのかを説明してくれた。　１ ２ ３ ４ ５ ６ ７

7. 教員は、私が質問をすることを進めてくれた。　　1 2 3 4 5 6 7

8. 教員を信頼できる。　　1 2 3 4 5 6 7

9. 教員は、私の質問に丁寧に答えてくれた。　　1 2 3 4 5 6 7

10. 教員は、私の要望を聞いてくれた。　　1 2 3 4 5 6 7

11. 教員は、人の感情にうまく対応できた。　　1 2 3 4 5 6 7

12. 教員は、私を一人の人間として考えてくれた。　　1 2 3 4 5 6 7

13. 私に対する教員の言い方は気に入らない。　　1 2 3 4 5 6 7

14. 新しい試みをする前に、教員は私の気持ちを考えてくれる。

1 2 3 4 5 6 7

15. 教員と、私の気持ちについて話ができると感じた。　　1 2 3 4 5 6 7

ご協力ありがとうございました！

Appendix G. Phase_2_Mobile Learning Survey_Post_E

Post Survey on Mobile Learning

1. What do you think was <u>good</u> about using your mobile phone for language learning?

_____

_____

2. What did you think was <u>bad</u> about using your mobile phone for language learning?

_____

_____

3. Would you like to use your mobile phone for language learning again in the future?

Y N

Please give your reasons.

_____

_____

If yes, please describe what types of activities you'd like to do.

_____

_____

4. How long did you spend on the <u>Quizlet vocabulary activities</u> each week? Please circle the appropriate amount.

u. Not at all
v. Less than 30 minutes
w. 30 – 60 minutes
x. More than 60 minutes

Please give your reasons.

_____

_____

5. Did the teacher's encouragement help you do the Quizlet activities? Y N

Please give your reasons.

_____

_____

6. Did you add new English words you find to Quizlet for your own study? Y N

If you answered "Y", about how many words did you add per week? _____

If you answered "N", please give your reasons why.

_____

_____

7. Where did you complete the Quizlet activities? Please put the following in order of where you'd did them. If you didn't do the Quizlet activities, please circle "g"

y. ___Home
z. ___Classroom
aa. Train, bus, etc.
bb. ___Cafe, restaurant, etc.
cc. ___Library
dd. ___Somewhere else (_____)
ee. I didn't do the Quizlet activities

8. Do you know how to do the following with Quizlet?

q.	Create a study set		Y	N
r.	Flashcards		Y	N
s.	Learn	Y	N	
t.	Spell	Y	N	
u.	Test	Y	N	
v.	Match	Y	N	
w.	Gravity	Y	N	
x.	Live	Y	N	

9. Do you think the teacher's encouragement through LINE helps you study English better?

Y N

Please give your reasons.

_____

_____

10. Did you prefer to use Quizlet or the handouts to study? Quizlet Handouts

Please give your reasons.

_____

_____

11. Do you need more training to use Quizlet to study English? Y N

12. Do you need more training to study listening in English? Y N

Thank you for your cooperation!

Appendix H. Phase_2_Mobile Learning Survey_Post_J

モーバイルラーニングに関するアンケート

1. スマートフォンでの語学学習に関して、よかったと思う点を書いてください。

_____

_____

2. スマートフォンでの語学学習に関して、よくなかったと思う点を書いてください。

_____

_____

3. 機会があれば、またスマートフォンで語学学習をしたいと思いますか。　Y　　N

その理由を書いてください。

_____

_____

「Y」と答えた場合、どのような学習をしたいのかを書いてください。

_____

_____

4. Quizlet の語彙学習を、一週間どれぐらい使いましたか。

y.　使う予定はない
z.　３０分未満
aa. ３０分以上、６０分未満
bb. ６０分以上

その理由を書いてください。

_____

_____

5. 先生の助言で、Quizlet の学習の補足になったと思いますか。　　Y　　N

その理由を書いてください。

_____

_____

6. 自分の英語学習のために Quizlet に新しい単語を入れましたか。　　Y　　N

「Y」と答えた場合、毎週何個ぐらいの入れましたか。_____

「N」と答えた場合、その理由を書いてください。

_____

_____

7. Quizlet の語学学習をどこでしましたか。下記のリストに順番をつけてください。使わなかった場合、「g」に「○」を書いてください。

ff. ___自宅
gg. ___教室
hh. ___電車、バスなど
ii. ___カフェ、レストランなど
jj. ___図書館

kk. ___その他（_____）
ll. Quizletを使いませんでした

8. Quizlet を利用して、次はできますか?

y.	「Study set」を作成する	Y	N
z.	「Flashcards」を利用する	Y	N
aa.	「Learn」を利用する	Y	N
bb.	「Spell」を利用する	Y	N
cc.	「Test」を利用する	Y	N
dd.	「Match」を利用する	Y	N
ee.	「Gravity」を利用する	Y	N
ff.	「Live」を利用する	Y	N

9. LINE を通しての先生からの助言は英語の勉強の手助けになっていると思いますか。Y N

その理由を書いてください。

_____

_____

10. Quizlet とプリントとどちらが勉強にいいと思いますか。 Quizlet プリント

該当する理由の全てに「○」をつけてください。

a. 頻繁にプリントを紛失した
b. Quizletが難しすぎてうまく使えなかった
c. Quizlet は面白くなかった
d. プリントの方がよく学習ができたと思う
e. Quizletの方がよく学習ができたと思う
f. Quizletの方がインターラクティブ
g. Quizletでは、発音も学習できた
h. プリントの方が手軽だった

i. Quizletには色々な学習ができた
j. Quizletのフォルダを簡単に友達にシェアできた
k. Quizletでは、上達は数字で見えた
l. Other: _____

11. Quizlet をよりうまく使いこなせるために、説明がもっと必要だと思いますか。 Y N

12. リスニングをより効果的にできるために、説明がもっと必要だと思いますか。 Y N

ご協力をどうもありがとうございました！

Appendix I. Letter of Information Regarding Research Participation

LETTER OF INFORMATION REGARDING RESEARCH PARTICIPATION

Dear Research Participant,

I am currently enrolled in Doctoral Program Graduate School of International Culture and Communication Studies (GSICCS) of Waseda University, Tokyo, Japan, and conducting entitled "The role of teacher presence through online social interaction for promoting task engagement outside of class"." This research is part of my dissertation project at Doctoral Program of GSICCS Waseda University. The purpose of this research is to investigate elements that promote students' engagement in tasks outside of class as well as to figure out the role of teacher presence and the role of social networking tool in fostering students' engagement.

The study will be carried out by the following rules:

1. The participation in the study is voluntary without any coercion. The participant is free to withdraw from the study at any time even though he/she agreed to join LINE groups and agreed to become a research participant during interviews.
2. If the prospective participant decides not to participate in this study, it will not cause any adverse consequence not affect the academic activities and grades of the prospective participant. The confidentiality of all information provided will be maintained and only used for research purposes.
3. The original name of the research participant will be replaced with a pseudonym.
4. The research data will not be used for any purpose other than thesis writing, presentation of the study results and scientific journal writing.
5. Research participant can withdraw at any time, during the research period or after the research was conducted. In that case, data from the participant will be destroyed and will not be published.
6. Research participant can refuse the publication of research results, during the research period or after the research was conducted.

If you have any further questions, feel free to contact the research through the following contact information. Thank you for your attention and cooperation.

Sincerely yours,

Researcher,

Tran Thi Ngoc Phuong

Email: phuongtran@fuji.waseda.jp