

A Case Study: Exploring the Use of the Line Application for Learning English at a Thai Public University

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Abstract

In Thailand, English skills are needed for conducting business. Unfortunately, Thai students often have low levels of English proficiency. The use of social media in education is an area of increasing interest for both educators and researchers. Research has shown social media applications have many benefits when used for teaching and learning. The Line application was launched in 2011 and has attracted many users in Thailand. Such an application could be used to practice and improve Thai students' English skills. The following study examined students' perceptions of learning and satisfaction levels whilst using the Line application in a web-enhanced course. The participants of the study were 30 textile engineering students studying an English language course at a Thai university. Conversational English and basic structures were practiced through the Line application. Course resources were also shared through the medium. Data was collected through a 5 point Likert scale questionnaire to determine students' perceptions of learning, satisfaction levels and their thoughts on the ease of use and media quality in relation to using the Line application for learning English. Overall, the study found that students were satisfied with using the Line application and believed it assisted their learning. The findings from this study suggest the Line application has potential as a tool for practicing and learning English. The Line application is free and widely used and the method outlined in this study is relatively simple to reproduce and could be adapted and adopted by English instructors throughout Thailand.

Keywords: Line application, English language, Learning, Education

1. Introduction

In Thailand, many non-English major students often lack the ability to communicate in the English language. Although they understand the importance of English, few can speak the language well. Studies suggest the roots of the problem usually lie in the past. From an early age Thai students are taught English. The teacher may have inadequate English skills and resort to teaching grammar structure in the Thai language and basic vocabulary from a book. Students therefore may know some words but find they cannot put them into a meaningful sentence (Choosri, 2014; Khamkhien, 2010; Noom-Ura, 2013). This situation improves little when students attend university or college. Non-English major students often have to take 3 courses in English over a 4 year period. These may consist of basic conversations and are often taught in very large classes. The students may also be limited in their exposure to the language outside of the classroom environment (Choosri, 2014). This leads to the situation where Thai universities are producing graduates lacking the language skills needed to compete in world markets. In addition, non-English major students often do not have the language skills to study abroad. The issue becomes a bigger problem when students decide to embark on an academic career. Graduates often do not have the skills to write research papers or present in the English language on an international stage. As a member of the Association of Southeast Asian Nations (ASEAN), Thailand has opportunities

whether as a production base, a market for selling services and products, or as a source of innovation and ideas. These opportunities can only be realised with strong English language skills. The situation of poor English skills amongst Thai graduates may therefore have negative consequences on the future prosperity of the nation (Nylander, 2014).

Many students have devices that can connect to the World Wide Web to access social media sites and applications at any place or time of their choosing. Social media applications have attracted the attention of researchers and educators within the educational sector. Line is a popular application amongst Thai students. The Line application was launched in Japan in 2011 and within two years had reached 200 million users. By the beginning of 2015, the number of Line users had reached 600 million. The Line application itself can be used for instant communications across various devices and platforms. In addition, it is also possible for Line users to exchange text messages, images, video and audio files and various forms of documents and presentations. Users of similar interests can also be placed into groups (Eun-ji & McCracken, 2015).

Various studies have found that social media applications have increased student satisfaction levels when used in an educational context. It has been suggested that the use of mobile devices and social media applications may provide solutions for some of the issues that exist in Thai education. For example, students often lack time to learn and practice a foreign language. As part of a blended or web-enhanced course, the Line application may provide a solution to the lack of opportunities to practice English. The Line application makes it possible to interact with students outside of the classroom environment (Hwang & Wu, 2014). Furthermore, the Line application may be used as a learning management system where class information is posted. Lessons may be posted before class to allow students to preview them. Questions related to the course may be answered through the application. The Line application is familiar to Thai students and should therefore be easy to use and integrate within a course (Van De Bogart & Wichadee, 2015).

There are various applications currently available that have potential benefits to learners of a second or foreign language. Various studies have proven their effectiveness as a supplementary learning resource. A study by Cavus and Ibrahim (2009) investigated using wireless technologies in education and the potential benefits of learning technical English vocabulary through Short Message Service (SMS) text messaging. The data gained from 45 1st-year undergraduate students showed statistically significant differences between pre and post-test scores. Furthermore, students reported enjoying learning through SMS messaging and mobile devices (Cavus & Ibrahim, 2009).

A study in the Netherlands conducted by Sandberg, Maris and Geus (2011) found that students' English proficiency significantly increased when using mobile applications and devices outside the classroom. In the study, three groups of learners were subjected to different levels of mobile technology use. The first group's English lessons were conducted solely within the traditional classroom environment. The second group took classroom lessons where mobile devices were integrated into the learning process. The third group received the same treatment as the second. In addition, the third group was required to use mobile devices outside of the classroom environment. The results taken from the

administered pre and post tests showed that the greatest improvement had been made by the group that had used the mobile devices outside of the classroom. In addition, the devices were shown to be enjoyable to use for learning and good for motivating for the students (Sandberg, Maris, and Geus, 2011).

In relation to using the Line application as a learning tool, Chen Hsieh, Wu and Marek's (2016) examined the benefits of a flipped classroom model for learners of English. The study focused on learning English idioms. The results from questionnaire data, observations, and semi-structured focus-group interviews were seen as positive. Furthermore, the Line application was seen to enhance student learning and motivation and satisfaction levels (Chen Hsieh, Wu, and Marek, 2016).

The use of the Line application has potential as an interactive learning tool. A large amount of today's communication is done through short messages using text based media. McCarty, Sato, and Obari, (2016) examined students' online interaction in English using smartphones equipped with the Line application. The students were encouraged to communicate in English within a closed group environment. The results of the study showed improvements in students English language competence in both receptive and productive skills. The results also revealed that students were positive towards the use of the Line application for learning English (McCarty, Sato, and Obari, 2016).

Van De Bogart and Wichadee (2015) examined students' perceptions of the Line application within a Thai context. The study focused on whether the Line application would have potential as a learning tool within an academic context. The study utilized undergraduate students and examined their acceptance of Line in terms of using it as an ad-hoc learning management system. The results showed positive results for perceived usefulness, ease of use, attitude and future intention to use the application. From a negative perspective, the uploaded video content used during the course was seen to cause various issues (Van De Bogart & Wichadee, 2015).

Various studies have discovered that extra-curricular participation has been linked to strong social relationships, higher self-esteem, and improved development amongst students. Participation in extra-curricular activities can also assist in making students feel more competent within the classroom. A web-enhanced or blended course environment therefore may prove beneficial to students studying a foreign language. The web-enhanced group environment can provide an interactive platform that allows access to a competent instructor outside of the classroom. This can be of particular benefit to students that do not have regular day to day contact with an English teacher. It offers an interactive environment where students are encouraged to practice their English skills (Usher, 2012). In an educational context, social networking applications have received little attention. In order to understand their potential benefits and limitations further research is required.

2. Research Objectives

This study examines whether students are positive towards the use of the Line application for learning English within a higher education context. The following research objectives were devised after a thorough review of the related literature.

2.1 To determine whether students' perceptions of learning when using the Line application in a web-enhanced English language course are significantly higher than a neutral value of 3.40 on a 5 point Likert scale.

2.2 To determine whether the use of Line application as a learning tool in a web-enhanced English language course produces satisfaction levels significantly higher than a neutral value of 3.40 on a 5 point Likert scale.

2.3 To determine whether ease of use of the Line application in a web-enhanced English language course is significantly higher than a neutral level of 3.40 on a 5 point Likert scale.

2.4 To determine whether the media quality used through the Line application in a web-enhanced English language course is significantly higher than a neutral value of 3.40 on a 5 point Likert scale.

3. Methodology

The participants were 30, year 3, non-English major students that were required to take English courses as part of their bachelor's degree program and to prepare them for internships in industry. The participants consisted of 18 male students and 12 female students and are Thai nationals. The students came from the Faculty of Textile Industry at a Thai public university. The participants were students that were studying with the researcher and therefore chosen due to convenience. In addition, the students were non-English majors with generally low level English skills as determined from a written placement test. All students within the year group were chosen to participate within the study. In relation to previous studies, a smaller group size was chosen to ensure greater levels of student participation when using the technology (Bettinger, Doss, Loeb, Rogers, & Taylor, 2017).

Due to time limitations the research design was kept relatively simple. As the course was part of the curriculum, the study did not employ a control and experimental group. This was to avoid any advantages being gained from the Line group. The research used a post-test design that measured perceived improvement as opposed to conducting a test of language skills. Any such test would have needed to have been tested for reliability and validity and measured using a pre and post design. The study used a mixed methods design with collected data being both quantitative and qualitative. The data was taken from informal student interviews, observations and a questionnaire. The data gained through the quantitative data was supplemented with qualitative data. The interviews were conducted in Thai by another lecturer and translated into English. The questionnaire was also translated from English to Thai by a competent lecturer. Interviews were conducted on a semi-formal basis with students being prompted for their thoughts on areas such as content, timing, appropriateness of materials and technical issues.

The survey tool was an adaption of questionnaires used in previous studies (Hong, Lai, & Holton, 2003; Hsu, 2014; Salyers, 2005). These questionnaires have been found to be reliable and valid tools for measuring the variables related to this study. The questionnaire

utilized a Likert scale that rated agreement on a scale of 1-5. The criteria for the validity testing of the questionnaire statements were based on Polit and Beck (2006). The Content Validity of the overall scale (S-CVI) procedure was applied to measure the validity of the statements. Four suitably qualified experts were chosen that were familiar with the study. Using a 4-point scale of 1= not at all suitable, 2= not suitable, 3= suitable, and 4= very suitable, were assessed for validity by four experts. The Content Validity Index, 1 and 2 were grouped together and 3 and 4 were grouped together. The results showed that the experts rated the items in the 3 and 4 grouping and thus the items were considered valid (Mean I-CVI = 1.00) according to Polit and Beck (2006). A reliability test was conducted using Cronbach's Alpha analysis. All of the values were greater than .70, which is considered reliable for final data collection (DeVellis, 2003; Manerikar & Manerikar, 2015) (see Table 1).

Table 1. The results of the Cronbach's alpha test

Variable	Alpha
Perception of Learning	.81
Satisfaction	.87
Ease of Use	.92
Media Quality	.77

The collected data was summarized using descriptive statistics with the mean and standard deviation calculated in relation to the variables of perceived learning, satisfaction, ease of use and media quality. Although there is some debate on whether ordinal Likert scale data can be analysed using parametric tests, various studies have suggested that parametric tests are sufficient to analyse Likert scale data without biases being introduced (Sullivan & Artino, 2013). In order to establish significance, the data was measured against a defined upper neutral value of 3.40 on a 5 point Likert scale. The upper neutral value is based on the following scale: 1.00-1.80=Strongly Disagree, 1.81-2.60=Disagree, 2.61-3.40=Neutral, 3.41-4.20=Agree and 4.21-5.00=Strongly Agree. This scale has been previously used in various studies within the social sciences to add comprehensibility and meaning to collected data (Khan & Ali, 2012; Kulprasit & Chiramanee, 2012; Ozyurt, 2015). In this case, strong agreement to the questionnaire statements can be interpreted as highly positive whereas strong disagreement can be interpreted as highly negative. Therefore, scores significantly over 3.40 could be interpreted as an endorsement. Data analysis was carried out with parametric, inferential analysis through t-tests and descriptive statistics of mean and standard deviation using the PSPP software package (no acronym). The analysis methods were based on previous research designs (Gefen, Straub, & Boudreau, 2000). All of the input data was independently checked for errors. The focus group interviews were analysed by looking to find common themes, similar comments and responses. This data was used to provide further evidence to strengthen the collected quantitative data. Observations were based on improvements in students' language proficiency, problems and issues related to uploaded content, encountered problems and user participation and interaction.

During the first lesson of the semester, the research idea was explained to the students. Students were then informed that any participation in the study was voluntary and their final grade would not be affected by non-participation. Before the study began students were questioned on their competency levels when using the Line application and mobile

devices and ownership levels. All students were found to possess a capable device that was loaded with the Line application. Technical difficulties were not anticipated but students were informed that any issues should be reported to the researcher. The study used a closed Line group that was not open to outside members. All of the students were over 18 and considered adults, therefore no safety or ethical issues were anticipated. Before the study students were informed of their responsibilities when using social media. Students were encouraged to share resources and post in the group. Posts were made on a daily basis by the researcher, usually in the morning and evening. The posts were essentially related to the previous weeks' lessons. Before each class a few posts were made that related to the up and coming classroom lesson. These were kept as simple as possible to allow students a chance to understand the new structure. Before each classroom lesson a preview document file of the lesson was uploaded to the group. This allowed students to preview the lesson and also gave them a useful resource for use in the classroom. After each classroom session, the lesson which included a presentation, video and text document was uploaded the group. After an 8 week period, students completed questionnaires and interviews. All data was collected anonymously. Students were thanked for their participation in the study.

4. Results

Various observations were made during the study. Regular posts were made on a daily basis by the students and posts were shown as read within a short time span. The use of the Line application added an immediate interactive element to the online learning. In general, around a third of the students would make regular and daily posts and attempt to join in the text conversations. The other two thirds were more passive and mainly participated through reading the posts. In a number of cases, the later posts would show an improvement in the grammar structure being used. For example, "I working" would later become "I am working". This structure had been practiced within the class and used regularly during the daily posts. As expected, the majority of posts were made in the morning (before 8 o'clock) and in the evening (after 6 o'clock). This would be the time when the students were at home and maybe had a little more time to reply to messages. During the study students would regularly post pictures with messages about what they were doing. This added a visual element to the post and was adopted by the researcher in later posts. In regards to posted resources, it was found that some videos would need reformatting before they would play correctly on mobile devices. It was also necessary to choose resources that were of a smaller file size. The preview lesson files were regularly used by the students within the class. Unfortunately, posted resources were automatically deleted after a specific time period (usually 1 week). This caused issues when students did not download the files. Later retrieval of course information or lessons then proved problematic resulting in files being re-uploaded to the group. In the classroom, students were generally using the resources that had been posted within the group. There were no reports of difficulties in relation to using the Line application as a learning tool.

The following table displays the overall mean and standard deviation for each individual statement and an overall mean and standard deviation in relation to perceptions of learning, satisfaction, ease of use and media quality (see Table 2). A response closer to one would be regarded as negative whereas a response closer to five would be regarded as positive. Variables for Perception of Learning, Satisfaction, Ease of Use and Media Quality were created from the individual questionnaire items. A descriptive analysis of the data

indicated that the students had generally high perceptions of learning ($\bar{x}=4.47$; $SD=.49$) high satisfaction levels ($\bar{x}=4.51$; $SD=.43$). The results also suggest that students found the technology easy to use ($\bar{x}=4.55$; $SD=.60$) and the media quality of a good standard ($\bar{x}=4.48$; $SD=.50$).

Table 2. Mean (\bar{x}), standard deviation (SD) and number of students (N) for the questionnaire statements.

Variable	\bar{X}	SD	n
Perception of Learning	4.47	.49	30
Satisfaction	4.51	.43	30
Ease of Use	4.55	.60	30
Media Quality	4.48	.50	30

The study aimed to determine whether students' perceptions of learning when using the Line application in a web-enhanced English language course are significantly higher than a neutral value of 3.40 on a 5 point Likert scale. By conventional criteria, the results of the t-test for perceptions of learning were considered to be extremely statistically significant. Intermediate values used in calculations are as follows: $t = 12.04$, $df = 29$, $p = < .001$ and mean difference = 1.07. The mean score for the variable resulted in levels significantly higher than the neutral value of 3.40 on a 5 point Likert scale.

The study aimed to determine whether the use of Line application as a learning tool in a web-enhanced English language course produces satisfaction levels significantly higher than a neutral value of 3.40 on a 5 point Likert scale. The results of the t-test for satisfaction levels were also considered to be extremely statistically significant. Intermediate values used in calculations are as follows: $t = 14.13$, $df = 29$, $p = < .001$ and mean difference = 1.11. The mean score for the variable resulted in levels significantly higher than the neutral value of 3.40 on a 5 point Likert scale.

The study aimed to determine whether ease of use of the Line application in a web-enhanced English language course is significantly higher than a neutral level of 3.40 on a 5 point Likert scale. The results of the t-test related to the ease of use were again considered to be extremely statistically significant. Intermediate values used in calculations are as follows: $t = 10.57$, $df = 29$, $p = < .001$ and mean difference = 1.15. The mean score for the variable resulted in levels significantly higher than the neutral value of 3.40 on a 5 point Likert scale.

The study aimed to determine whether the media quality used through the Line application in a web-enhanced English language course is significantly higher than a neutral value of 3.40 on a 5 point Likert scale. The results of the t-test for media quality were found to be extremely statistically significant. Intermediate values used in calculations are as follows: $t = 11.87$, $df = 29$, $p = < .001$ and mean difference = 1.08. The mean score for the variable resulted in levels significantly higher than the neutral value of 3.40 on a 5 point Likert scale.

The interview data found that students were generally satisfied with the learning experience. The students had not used Line as an educational tool in any of their previous

courses. Some though had used the application has a tool to contact their lecturer in previous courses. There were no user issues related to the Line application reported during the focus group interviews. The uploaded media was kept to smaller file sizes so there were generally no issues related to poor internet connections. In addition, the media was designed so that it was easy to view on a smaller screen. Students enjoyed the interaction of the Line application and found it engaging. The students that had missed classes found the ability to catch up with a class to be convenient. The process of reviewing a lesson was also popular. Overall, the students found the use of the Line application beneficial.

5. Discussion

The purpose of this study was to examine whether using the Line application in an educational context had positive effects on students' learning and satisfaction levels. In addition, the study aimed to examine factors related to the ease of use and the quality of the media posted within the Line learning group. Overall, students were satisfied with using the Line application for learning and reported high levels of perceived learning. The Line application worked well as a learning tool, however, several minor issues were noted in regard to uploading media on the platform.

Previous research has shown that the use of the Line application for learning English can be not only effective but also engaging for students (Liao & Lin, 2016). McCarty, Sato and Obari (2016) found that students actively participated when learning English through the Line application and showed positive attitudes towards the medium. In relation to this study, around a third of the students participated in the conversations on a daily basis. In a traditional classroom format in a Thai context, students are often too shy to speak. Active participation levels are therefore generally quite low (Khamkhien, 2010; Noom-Ura, 2013). Although active participation levels could be interpreted as being relatively low, it must be remembered that the students' English skills were of a low level. Therefore, it could be suggested that stronger students may respond more actively to the media than those of a low level.

Van De Bogart and Wichadee (2015) discovered students studying at a Thai university were positive towards using the Line application. The participants found the application to be useful for academic purposes. The present study found similarities to some of the issues that Van De Bogart and Wichadee (2015) found during their study. For example, the instructor should consider whether content such as large High Definition video files would be suitable for the Line application platform. In this regard, the instructor may consider using an online file hosting service for large file sizes and directing the students to the file via a posted link. Furthermore, it has been shown that the careful selection of materials may also help ensure that students actively participate in an online environment (Wana & Boonyaprakob, 2014). As noted in this study, a visual element such as a photograph can generate interest and conversation. Students can share photos and talk about what they are doing at the present time. The social element of social media can be used to the language instructor's advantage.

Previous studies have found students recognise the benefits of using social media for practicing. In addition, students that study in web-enhanced programs been shown to be more

motivated and have better attitudes towards learning than students studying in traditional classrooms (Banditvilai, 2016). In relation to this study, the students generally participated well and used the Line application on a regular basis for learning English even though the language is not their major subject. The platform therefore appears to have potential as a learning tool for motivating students. Students that are motivated to learn and have good attitudes towards a subject are more likely to study and therefore meet the learning outcomes of a course and achieve higher test scores. In addition, if students can see improvements in their ability they are also more likely to be satisfied with the course or program (Mark, 2013).

6. Recommendations and Conclusion

The findings from this study suggest that the use of the Line application for practicing and learning English was largely successful. The study suggests social networking applications have social presence and this may have contributed to its success. The overall mean values for each of the variables were found to be higher than the neutral value of 3.40 and the t-test analysis showed statistical significance ($< .001$) for each of the measured variables. This may therefore indicate that the use of the Line application as a web-enhanced learning tool has the potential to increase satisfaction levels among students. In addition, students also perceive that their learning improved by using the application. The variables of ease of use and media quality were both shown to be at a high and satisfactory level. The interview data was on the whole positive. Students suggested that the interactive element was both enjoyable and beneficial. The use of the Line application was seen as a convenient method for learning and practicing English outside of the classroom. Social media use within educational contexts is an area of increasing interest for both researchers and instructors. New applications are frequently emerging that may have educational benefits but remain relatively untested in educational contexts. The data that is available shows that social media applications have a number of benefits for learners. Social media and networking tools have shown to increase learner achievement and satisfaction levels. This present study has shown that students perceive various learning benefits when using the Line application. In addition, the study has shown that students are satisfied with using social networking tools for learning English as part of a web-enhanced course.

The use of social media in education is still within its infancy. There are many issues that could arise when using social networking applications for teaching and learning. With younger learners the platform may prove unsuitable due to security and online safety fears. In regard to adult learners, such fears and concerns are reduced. Although improvements in language proficiency were perceived and observed during this study, no proof was obtained as to whether the Line application is any more effective than traditional forms of learning media such as textbooks and word lists. In addition, although easier to implement, the relatively small number of participants in this study may limit the results generalizability. It is therefore important that further data and information is collected on the utilization of such applications for the benefit of teaching and learning. It is recommended that future studies examine the use of the Line application for practicing and learning English with both major and non-major students. Further research could focus on increasing English proficiency levels and a pre and post-test could be used to determine improvements and comparisons could be made between control and experimental groups. Larger group sizes could be used to determine the practicalities of teaching larger numbers through the Line application. Future

studies could examine whether students could use a social networking application to practice English independently of the instructor. The findings from this study could be used to provide an improved university experience for students and may assist instructors in identifying uses for social networking applications in language learning contexts.

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