

Development of Learning Activities in Flipped Classroom to Enhance English Speaking Skill of Undergraduate Students in Elementary Major*



¹Boriboon Chobthamdee and Patthaporn Langprayoon

¹Phranakhon Si Ayutthaya Rajabhat University, Thailand.

¹Corresponding Author's Email: boss_av45@hotmail.com

Abstract

The objectives of this research were 1) to develop learning activities in flipped classroom to enhance English speaking skill of university students in elementary major as a required effective criterion at 80/80, 2) to study the ability levels of English speaking skill from the university students through learning activities in flipped classroom 3) to compare the ability levels of English speaking skill of the university students before and after implementing flipped classroom. The sampling of this research was selected by the purposive sample group and the sampling was 33 undergraduate students in Elementary Major in the Faculty of Education, Phranakhon Si Ayutthaya Rajabhat University. All of them enrolled in English for Elementary school teacher course. This research was an experimental research and the research materials were flipped classroom learning activities' lesson plans, speaking skills' observation forms, and tests. The data were analyzed by Percentages, Means, Standard Deviation (S.D.), Effective (E_1/E_2) and T-Test.

The research results were found as follows; 1. The effective of criterion learning activities in flipped classroom to enhance English speaking skill of the university students in Elementary majors were 80.85/81.72. 2. The ability of the students in speaking skills was at high level. 3. The ability of English speaking skill after using the flipped classroom learning activities was higher than before using this method with statistically significant difference at .05 level.

Keywords: Learning Activities; Flipped Classroom; English Speaking Skill

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Introduction

English language is important for communication. People around the world used English as an international language and they used English through reading, speaking, listening, and writing. People use English speaking for their communication. The finding of the study of Bailey, and Savage (1994) found that the most needed skills from four skills is speaking skill. Speaking clearly could make people understand when they communicate with each other. In addition, Thailand participated in the ASEAN community and English speaking skill is necessary for communication. Undergraduate students especially, the students in Elementary major have to learn various kinds of subjects in order to apply their knowledge and skills in teaching after they graduate and become to be the primary teachers in the future. English speaking skill is one of the most important skills that Thai students need to improve and English communication is one of the most needed skills in the 21st century (Aiello, 2018). However, one problem that students failed to develop their speaking were lack of self-confidence and worried about speaking. Therefore, finding the way to improve speaking skill could make students speak English better.

The outbreak of the novel coronavirus (COVID-19) has led to the development of teaching and learning methods and the development of online learning activities using media and technology could assist teachers in teaching and learning outside classroom. Students could learn by themselves at anywhere and anytime through media and technology provided by the teacher. According to the epidemic of Coronavirus, some students didn't go to school. They studied by themselves through various media such as YouTube or the Internet. They had to learn outside their classroom and discuss their topics with their teachers and classmates through online classroom.

Therefore, the ways of teaching and learning need to be applied for managing new classroom to be an inverted classroom style. Students could learn through media and technology that teachers have created for students or other media available on the internet (Bergman, and Sams, 2012; Green, Banas, and Perkins, 2017). There are teaching and learning activities that can enhance learning achievement of students instead of lectures in the classroom. The students could learn by themselves through video, multimedia, animation, social media and other media related with the content that provided for learning activities (Finn, and Zimmer, 2012; Chen et al. 2014; Green, Banas, and Perkins, 2017). Flipped classroom is not only limited on learning management, but it also demonstrates the systems of media and technology used to manage learning activities which focused on the objective, developing



learners to create their own knowledge. Furthermore, the teachers play an important role as a coach that could deal with their students during their learning activities. It is also support professionalism of the teachers in managing learning activities and leads to the good learning management in the future (Muzyka, and Luker, 2016; Wolff, and Chan, 2016; Kurt, 2017).

Flipped classroom was used for teaching and learning in epidemiological conditions. It is used in a variety of subjects to develop students' knowledge, their understanding, or related skills in order to meet the objectives of the learning management (Nicol, and Macfarlane-Dick, 2006; Johnson et al. 2014; Reidsema et al. 2017). Learning activities in flipped classroom was conducted in this research because this approach could help students who couldn't catch up while teaching. They can learn from anywhere and anytime. The role of the teachers is changed to be a coach or a facilitator and the students could learn by doing. The teachers could support and give them through learning experiences. The students gain knowledge through technology before class and do some activities when they meet their teachers in the classroom. Besides, English speaking skill is one of the most necessary skills for the students to work, use in their daily life or communicate with the foreigners (Burns, and Siegel, 2018). The undergraduate students especially for the Elementary major students who becomes the primary school need to improve their speaking in order to tech their students effectively. However, the teaching and learning in the classroom have been changed due to the epidemic.

According to the previous research, the role of the teacher has been changed to be a facilitator. It could be noticed that whenever the teachers teach the students in the classrooms, they are indifferent, they use their mobile phones while studying and some students come to class late. Therefore, they couldn't understand of what the teachers teach and the teacher needs to repeat to teach again (Makphon, 2016; Saenboonsong, 2017; Suwanno, and Lumbensa, 2019). Furthermore, there are too many activities for the university students to do and sometimes they couldn't come to the class or join the class on time, so they couldn't catch up with the content. Due to the COVID-19 pandemic, online learning play an important role of education. Students have to learn by themselves through various technologies and the role of the teachers become to be a facilitator. For this reason, learning activities in flipped classroom could be develop to enhance English speaking skill of university students in elementary major in order to increase the potential of the university students in English speaking skill.



Objectives of the research

1. To develop learning activities in flipped classroom to enhance English speaking skill of university students in elementary major as a required effective criterion at 80/80.
2. To study the English ability level of speaking skills from the university students in Elementary major using learning activities in flipped classroom.
3. To compare the ability of English speaking skill from the university students before and after using learning activities in flipped classroom.

Research Methodology

1st Step: Population and Sampling

The population used in the research was 135 undergraduate students in Elementary Major in the Faculty of Education, Phranakhon Si Ayutthaya Rajabhat University.

The sampling group was 33 undergraduate students in Elementary Major in the Faculty of Education, Phranakhon Si Ayutthaya Rajabhat University. The sampling was selected by the purposive sample group and the students enrolled in English for Elementary school teachers course.

2nd Step: Research material and validity

1. Research materials were flipped classroom learning activities lesson plans, speaking skills observation forms and tests.

2. The research instruments were inspected by 3 experts in order to check the quality of the instruments and the expert evaluation results were evaluated to find the content validity by using the method of determining the Item-Objective Congruence (IOC). The selected item was selected by considering the items with IOC values greater than or equal to .50 and use recommendations from experts to improve accuracy and suitability. The IOC values of this study were 0.67-1.00.

3. The modified research instruments were tested by one-to-one testing and the student was the university students in Elementary major. Then the experimental data were developed. Then, the experimental group of students with 10 non-sample university students in Elementary major who were not the sampling group (small-group testing), tested the research instruments.

4. The difficulty and the power index of the test from the result was analyzed, and the data items were selected by considering the difficulty index between 0.20-0.80 and the reliability of the test was analyzed. The validity of the tests was analyzed and the data were

greater than 0.70 by using the formula Kuder Richardson (KR-20). The reliability of the test was 0.85.

3rd Step: Data Collection and Data Analysis

1. The researcher conducted the research by using learning activities in flipped classroom to enhance English speaking skill of the university students in elementary major in the second semester of the academic year 2019
2. The data collection of the English speaking skill test would be 1 score for the correct answer and 0 for the wrong answer.
3. The statistics used for data analysis were Percentage, Means, Standard Deviation (S.D.), Effective (E1/E2) and T-Test.
4. The analysis of observation data of English speaking skill was identified by the following interpretation criteria.
 - 4.50-5.00 shows the English speaking skill is at the highest level
 - 3.50-4.49 shows the English speaking skill are at a high level
 - 2.50-3.49 shows that English speaking skill are at a medium level
 - 1.50-2.49 shows that English speaking skill are at a low level
 - 1.00-1.49 shows that English speaking skill are at the lowest level.

Research Results

The results of the development of learning activities in flipped classroom to enhance English speaking skill of the university students in Elementary major are follows:

Table 1: The results of the development of learning activities in flipped classroom to enhance English speaking skill of the university students in Elementary major are follows:

Flipped classroom learning activities	Test score (E ₁)			Posttest (E ₂)		
	Full score	Average	Percentage of average	Full score	Average	Percentage of average
Subject 1: classroom expression	16	13.03	81.44	10	8.27	82.70
Subject 2: giving opinion	18	14.42	80.11	10	8.18	81.80
Subject 3: agree and disagree	20	16.09	80.45	10	8.09	80.90

Subject 4: command and request	17	13.84	81.41	10	8.15	81.50
Average total	17.75	14.35	80.85	10	8.17	81.72

Table 1 shows the results of the efficiency of learning activities in the flipped classroom to enhance English speaking skill for the university students with an average efficiency of 80.85/81.72. The process efficiency value was 80.85 (E1) and the efficiency value of the result was 81.72 (E2). Therefore, the criteria of the effectiveness of learning activities in flipped classroom to enhance English speaking skill of the university students is 80/80, indicating that the learning activities in flipped classroom to enhance English speaking skill of the university students are more effective than the standard criteria set.

Table 2: The English ability of speaking skills from the university students after using learning activities in flipped classroom.

Factors	\bar{X}	S.D.	Range
Communicative sentences	4.24	0.66	High
Vocabulary	4.21	0.78	High
Pronunciation	4.18	0.68	High
Accent	4.15	0.56	High
Naturally of the language used	4.03	0.63	High
Total Average	4.16	0.66	High

The result from Table 2 has been showed that the English ability of speaking skills from the university students after using learning activities in flipped classroom was at a high level. The communicative sentences was at the highest level ($\bar{X} = 4.24$), followed by vocabulary ($\bar{X} = 4.21$), Pronunciation ($\bar{X} = 4.18$), Accent ($\bar{X} = 4.15$) and the lowest level of ability in speaking was naturally of the language used ($\bar{X} = 4.03$).

Table 3: The comparison of the ability of English speaking skill of the university students before and after using learning activities in flipped classroom.

Experimental group	n	Full score	\bar{X}	S.D.	t	Sig
Pre-test	33	40	24.24	2.37	20.82	0.000
Post-test	33	40	32.70	2.07		

Table 3 shows the comparison of the ability of English speaking skill of the university students before and after using learning activities in flipped classroom. The students' speaking ability after learning was higher than before learning at statistical significance of .05.

The new body of knowledge

According to the results of the study, it could be implied that flipped classroom could support self-learning from the students in 21st century because they could learn by themselves at anywhere and anytime. Moreover, the students could prepare themselves before class by searching more information through various resources, especially speaking. The students could practice themselves and done many learning activities both themselves and group work. To sum up, flipped classroom and various learning activities could develop speaking skills and it might increase other skills. Furthermore, students could create their self-knowledge which related to constructionism.

Discussion of research results

The results of the study revealed that the effectiveness of learning activities plan in flipped classroom to enhance English speaking skill of the university students in Elementary major with an average efficiency criteria of 80.85/81.72. The value of the process of developing learning activity plan in flipped classroom to promote English speaking skill of primary education students (E_1) was at 80.85 and the effectiveness of the outcomes of the classroom learning activities. (E_2) was at 81.72. It could be considered that both values were higher than the 80/80 threshold as specified. It is possible that the process of developing learning activities in flipped classroom is developed following the process of the innovation development and efficiency. In the development process, there is an examination and evaluation of the quality of the lesson plan, pretest, test score and posttest by the experts. The tests were analyzed the difficulty and the accuracy. When the inspection of the quality were analyzed, the research instruments were edited and developed until it was completed. The result of learning activities in flipped classroom was in accordance with the correct procedures according to principles and theories and then the result in the efficiency of learning activities was at high level. The results of this research was related to the research of Thinhawong (2018) which studied the development of English pictures in the storybooks to develop the reading ability of grade 6 students in Phetchaburi province. There was a process of the development of English pictures in the storybooks to develop the reading ability to achieve criteria 80/80. The result of the

research had the efficiency of English picture storybooks to develop the reading ability at $83.02/82.57$ which is higher than the specified criteria. It is an example of the research that has the same methods and procedures of the development of English picture storybooks to develop English reading ability at the same direction, which is more effective specified criteria.

The results of the study have been found that the students in Elementary major had developed high level of English speaking skill. The highest ability in speaking was communicative sentences at an average of 4.24 and a standard deviation of 0.66, followed by Vocabulary at an average of 4.21 and a standard deviation of 0.78. The English speaking skill are high level. It is possible that the students have experienced through a variety of media and technology in the classroom, and their English speaking skill were better. This is consistent with the research conducted by Langprayoon, and Chobthamdee (2020) on the effect of blended learning with collaborative learning via social networking on video sharing to enhance English speaking ability of Students in the Faculty of Education have English speaking skill at a high level. In addition, the result from the research of Saenboonsong, and Poonsawad (2020) which conducted on a digital storytelling on video to improve English speaking skill of Thai EFL undergraduate students has been showed that the use of media and digital technology in teaching could develop English speaking skill in higher ability. Students were also satisfied with the teaching and learning blending with technology for teaching at a high level.

The comparison of English speaking skill before and after using learning activities was found that English speaking skill of the students were higher than before learning with statistically significant difference at .05 level. It is considered that learning activities could develop the ability in English speaking skill through self-learning activities. The students are able to manage their learning time, self-study through the internet and use the knowledge to summarize discuss and create their new knowledge. The research of Chobthamdee, and Langprayoon (2020) studied the effect of flipped classroom with digital video on learning achievement of English Teaching Program Students showed that the scores after learning were significantly higher than before studying statistics at the level of .05. Therefore, the research results were conducted at the same direction, it might affect in learning achievement. It could be implied that learning activities in flipped classroom affected to the achievement of English speaking skill.



Conclusion

Learning activities in flipped classroom could help the student to develop English speaking skill because of the effective of learning activities in flipped classroom. On the other hand, to promote learners' self-learning through the media and technology available on the internet, students could study anywhere and anytime and the students could manage their learning time according to the readiness to study. They could learn and gain the new knowledge from the variety of information from various learning resources and they could use their knowledge to analyze, synthesize, exchange their knowledge with their friends in the classroom. So, learning activities in flipped classroom could be supported and the flipped classroom research could be conducted.

Suggestions

1. The suggestion for using the finding of the research

1.1. The related institute should apply and design learning activities for the students under the concept of flipped classroom.

1.2. The scope of test could be related with the lesson plans. The result could be assured that learning activities in flipped classroom could develop English speaking of university students.

2. The suggestion for the future research

Future research should involve the following issue:

2.1. Learning activities and the theory or the concept of flipped classroom could be more focused by the researchers who wants to continue to conduct learning activities in flipped classroom. They should learn more about the knowledge of principles, concepts, theory, the flipped classroom and theory of teaching English speaking skill before using learning activities.

2.2. Further research should be conducted to improve other English skills and other subjects.

2.3. Further research should be conducted with the students in different level such as high school students.

References

Aiello, J. (2018). *Negotiating Englishes and English-Speaking Identities A Study of Youth Learning English in Italy*. New York: Routledge.

Bailey, K. M., & Savage, L. (1994). *New Ways in Teaching Speaking*. Illinois: Pantagraph Printing.

Bergmann, J., & Sams, A. (2012). *Flip Your Classroom Reach Every Student in Every Class Every Day*. USA: International Society for Technology in Education.

Burns, A., & Siegel, J. (2018). *International Perspectives on Teaching the Four Skills in ELT Listening, Speaking, Reading, Writing*. United Kingdom: Springer.

Chen, Y. et al. (2014). Is FLIP enough? Or should we use the FLIPPED model instead? *Computers & Education*, 79, 16-27.

Chobthamdee, B., & Langprayoon, P. (2020). *Effect of Flipped Classroom with Digital Video on Learning Achievement of English Teaching Program Students*. IMELT 7 International Mobile Education & Learning Technologies Conference. 22-23 February 2020, Singapore.

Finn, J.D., & Zimmer, K. (2012). Student engagement: what is it? Why does it matter? *Handbook of research on student engagement*. New York: Springer.

Green, S. C., Banas, R. J., & Perkins, A. R. (2017). *The Flipped College Classroom Conceptualized and Re-Conceptualized*. Switzerland: Springer.

Johnson, et al. (2014). *NMC Horizon Report: 2014 Higher Education Edition*. USA: New Media Consortium.

Kurt, G. (2017). Implementing the Flipped Classroom in Teacher Education: Evidence from Turkey. *Educational Technology & Society*, 20(1), 211-221.

Langprayoon, P., & Chobthamdee, B. (2020). *Effect of Blended Learning with Collaborative Learning via Social Networking on Video Sharing to Enhance English Speaking Ability of Students in the Faculty of Education*. IMELT 7 International Mobile Education & Learning Technologies Conference, 22-23 February 2020, Singapore.

Makphon, S. (2016). Learning Achievement Development of Technical Drawing Subject by Flipped Classroom Approach. *CSNP-JOURNAL*, 1(1), 31-36.

Muzyka, L. J., & Luker, S.L. (2016). *The Flipped Classroom Volume 1: Background and Challenges*. USA: Oxford University Press.

Muzyka, L. J., & Luker, S.L. (2016). *The Flipped Classroom Volume 2: Results from Practice*. USA: Oxford University Press.

Nicol, D., & Macfarlane, D. (2006). Formative Assessment and Self-Regulated Learning: A Model and Seven Principles of Good Feedback Practice. *Studies in Higher Education*, 31(2), 199–218.

Reidsema, C. et al. (2017). *The Flipped Classroom Practice and Practices in Higher Education*. Singapore: Springer.

Saenboonsong, S. (2017). The Development of Flipped Classroom Model using Cloud Technology Approach on Academic Achievement in Computer Science for Teacher Course for Undergraduate Students. *Journal of Graduate Studies Valaya Alongkorn Rajabhat University*, 11, 133-146.

Saenboonsong, S., & Poonsawad, A. (2020). *A Digital Storytelling on Video to Improve English Speaking Skills of Thai EFL Undergraduate Students*. IMELT 7 International Mobile Education & Learning Technologies Conference, 22-23 February 2020, Singapore.

Suwanno, P., & Lumbensa, P. (2019). Effects of a Flipped-Classroom Model with Research-Based Learning of the Fourth Year Students at Yala Rajabhat University. *Journal of Yala Rajabhat University*, 14(1), 1-10.

Thinhanwong, S. (2018). *Development of English Picture Storybooks to Promote the Reading Ability of Prathom Suksa 6 Students in Phetchaburi Province*. The 5th Rajabhat University National & International Research and Academic Conference (RUNIRAC V). 2–5 December 2018, Phetchaburi, Thailand.

Wolff, C. L., & Chan, J. (2016). *Flipped Classrooms for Legal Education*. Singapore: Springer.