ENHANCING STUDENTS' ACQUISITION IN LEARNING ENGLISH FOR SPECIFIC PURPOSES BY THE FLIPPED CLASSROOM MODEL – A CASE STUDY AT NGHE AN UNIVERSITY OF ECONOMICS

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| Abstract

The aim of the study was to investigate if the Flipped classroom model enhances students' acquisition when learning English for specific purposes (ESP). By applying the design of pre-test and post-test on equivalent groups, the study was conducted among third-year students who were studying ESP. Two classes were chosen to be the population of the study. One class was engaged as an experimental group receiving the Flipped classroom model while the other class was control group in which the traditional teaching method was being used. Data were collected through questionnaires and tests. Some interesting findings of the study were revealed and obviously, there was a significant difference in students' motivation between experimental and control groups. Some recommendations were given in the light of the results of the study as well.

1. Introduction

English for Specific Purpose (ESP) is a specialized branch of English language teaching that focuses on equipping students with the language skills and knowledge needed for specific professional or academic fields. The significance of ESP cannot be overstated, as it directly addresses the practical needs and goals of learners, making it a valuable tool for career development and academic success, especially in the time of International Integration.

It is undeniable that learning a language is a difficult, drawn-out process that calls for familiarity with the four essential language skills of listening, speaking, reading, and writing as well as grammar, vocabulary, and phonological aspects. For learners of ESP, of all these four skills, reading is essential for their English language proficiency. For most of the students and teachers surveyed, ESP is considered one of the big challenges in learning and teaching a foreign or a second language because of its long text and a vast amount of new vocabulary. Traditional methods of teaching ESP often involve instructors delivering content in a one-size-fits-all manner, which may not fully engage students or cater to their individual learning styles and paces. As a result, many researchers have been trying to smooth the challenge and along with the development of the digital age, new teaching methodologies are continually emerging to enhance the acquisition of ESP. One such innovative approach is the Flipped classroom model. This is a pedagogical approach that reverses the traditional teaching methods. In a Flipped classroom, students are exposed to instructional content (e.g., lectures, readings, videos) independently before class, allowing them to absorb foundational knowledge at their own pace. Classroom time, on the other hand, is dedicated to interactive activities, discussions, and practical applications of the pre-learned material. This model has gained recognition across various educational settings for its potential to improve students' engagement, critical thinking, and overall learning outcomes.

In the process of producing e-learning teaching materials and applying online teaching methods at Nghe An University of Economics, the author has also recognized that the Flipped classroom model shows a different technical means and educational method from the traditional ones.   Therefore, the author would like to conduct research to see if the Flipped classroom model can help help and motivate students in their learning process.

2. Literature Review

It appears that the language education profession has recently placed a lot of focus on ESP in order to keep up with the advancement and integration of the world in all disciplines. As stated by Hans (2015), ESP more concentrates on language in context than on teaching grammar and language structures. Fitria (2020) defines ESP as a particular domain that is goal-oriented and focused on English teaching and learning designed for specific learners according to learners's academic needs. Thus, teaching materials and teaching methods must have a connection to the real world of the fields which the subject relates. This makes ESP a challenge for students to master and for lecturers to teach. Teaching ESP face-to-face is inherently not an easy work. Online ESP teaching is obviously a big challenge. As a result, many scholars, and researchers have done a lot of studies to help students feel easier and motivated when studying ESP. Along with the shift from teacher-centered to student-centered teaching method, the Flipped classroom model has been advocated in higher education. The analysis in the studies of Tran (2016); Bui, (2016); Nguyen, Tan, & Lee, (2018) and Nguyen, (2018) has shown that students were interested in Flipped classroom courses. The students showed their preference in learning content prior to class and the students experiencing a Flipped classroom approach considered themselves more engaged than those attending traditional courses. Especially during the COVID-19 pandemic, a number of researchers have paid their focused on the Flipped classroom model when teaching online. Chen and Hwang (2021), believed that Flipped teaching could prompt underachieving learners' active learning and thereby enhance learning effectiveness. Additionally, they asserted that students being taught with the Flipped classroom models showed higher levels of comprehension. With the aim of supporting to the student's learning achievement and engagement in spite of pandemic constraints, Smith and Boscak (2021) conducted a study on the Flipped classroom model and they found out that students gained more confidence in their learning. The impacts of the Flipped classroom on education students' impressions of their learning and motivation during the present pandemic have also been studied by Pedro Miralles-Martnez and José Mara Campillo-

Ferrer. The results showed that students experiencing the Flipped classroom model had positive perceptions, noting the advantage of practical in-class activities, as well as increased self-autonomy in learning. In contrast, Nguyen, & Choon & Kean (2018) has shown in their study some of the challenges that students incurred during the implementation the Flipped classroom model. The lack of technology skills, Internet resources, and time were the biggest obstacles in applying The Flipped classroom model and as a result, students felt studying this way a heavy learning workload. Nevertheless, the authors agreed that if the aforementioned challenges are tackled, Flipped classrooms will soon become an effective teaching model in the Vietnamese EFL context.

The survey was designed to provide information on the following research questions in order to achieve the study's objectives:

1. Does the Flipped classroom model enhance students' acquisition when learning ESP?
2. What are the strategies for teaching ESP?

3. Methodology

3.1. Pedagogical Setting and Participants

A total of 93 third-year students who were learning ESP were asked to do a pre-test and a post-test given by the author. The participants were in two classes that I was teaching. The participants were divided into two groups - one is the control group, including 45 students and the other is the experiment group with 48 students. The groups were in the class unit. The participants were from 20 to 23 years old.

3.2. Design of the Study

To meet the aim of the research. I used a combination of qualitative technique and action research in the classroom. The design adopted to act in research was a "pre-test and post-test for both control and experiment groups".

3.3. Data Collection and Analysis

The procedure of the study

To fulfill the objectives of the study, I applied a three-step cycle to do the research in which I defined the participants' knowledge background for step 1, implemented the Flipped classroom model for the second, and checked the improvement in students' acquisition for the last one.

Data collection and analysis

The Flipped classroom model effectiveness

The identical post-test and pre-test were used in both groups, control and experiment, to assess the effectiveness of the Flipped classroom concept. When the students began their ESP training, they took the pre-test. The post-test was given to the participants at the completion of the course. Their results were compared in order to assess how much the students' acquisition had improved during the ESP learning process.

Firstly, the scores of the control group and experiment group were characterized using the mode, median, mean, and standard deviation. Secondly, I adapted the Independent T-test to analyze the differences between the two tests so that I could determine the Probability which helped me verify if the mean value between the control group and the experiment group was significant or not.

Thirdly, I applied Cohen's (1998) formulas to calculate the effect size (ES) of the value. This value was used to determine whether the action of implementing the Flipped classroom model had any significance.

Strategies for online teaching English for specific purposes
In order to learn more about students' perception of the Flipped classroom model and which actions helped them the most when studying ESP online, the researcher conducted a survey among the participants of the experiment group. Participants were asked to respond on a five-point Likert scale, selecting from strongly agree to strongly disagree. Scores of 5, 4, 3, 2, and 1 represent strongly agree, agree, neutral, disagree, and strongly disagree, respectively. Then Spearman Brown formulas were modified to assess the validity of the information gathered in the survey via the questionnaire.

4. Results and Discussion
The effectiveness of the Flipped classroom model.

Table 1. Data description of pre-action test of control group and experiment group

Value	Control group	Experiment group
Mode	6	6
Median	6	6
Mean	5,98	6,00
Standard deviation	1,21	1,01

As it can be seen in Table 1, the students' results of the control group and that of the experiment group were not so much different, with the average score is, respectively, 5,98 and 6,00. This means that the background of the two groups are suitable for conducting action research on the groups.

Table 2. Data description of pre-test and post-test for both groups: control and experiment.

Value	Control group		Experiment group	
	Pre-test	**Post-test**	**Pre-test**	**Post-test**
Mode	6	6	6	7
Median	6	6	6	7
Mean	5,98	6,24	6,00	6,69
Standard deviation	1,21	0,97	1.01	1,11
P			0,001	
ES			0,62	

Table 2 shows that there have been differences in average scores between the two groups. The post-test result was higher than the pre-test result. This increased from 5,98 to 6,24 in the control group and from 6,00 to 6,69 in the experiment group, however, the difference between the two tests and the two groups is not so high. Considering to the experiment group results, it can be seen clearly that the post-test average score was higher than that in the control group. More students got a mark 7. The value of p-value is 0,001, showing that the data is meaningful, the random data rarely occurs. The effect size is 0,62, which means the action does have effectiveness. The above addresses the first research question the Flipped classroom model does enhance the students' acquisition when learning English for specific purposes

Students' Perception of Flipped Classroom Model.
As for the second research question and for the goal of drawing out strategies for a better online teaching ESP, the Flipped classroom model accompanied by some of the internet applications, has been implemented in the class which was chosen to be the experiment group. A survey was taken after the course to learn how the students felt about the use of the Flipped classroom model.

Figure 1: Data description on students' perception on The Flipped classroom model
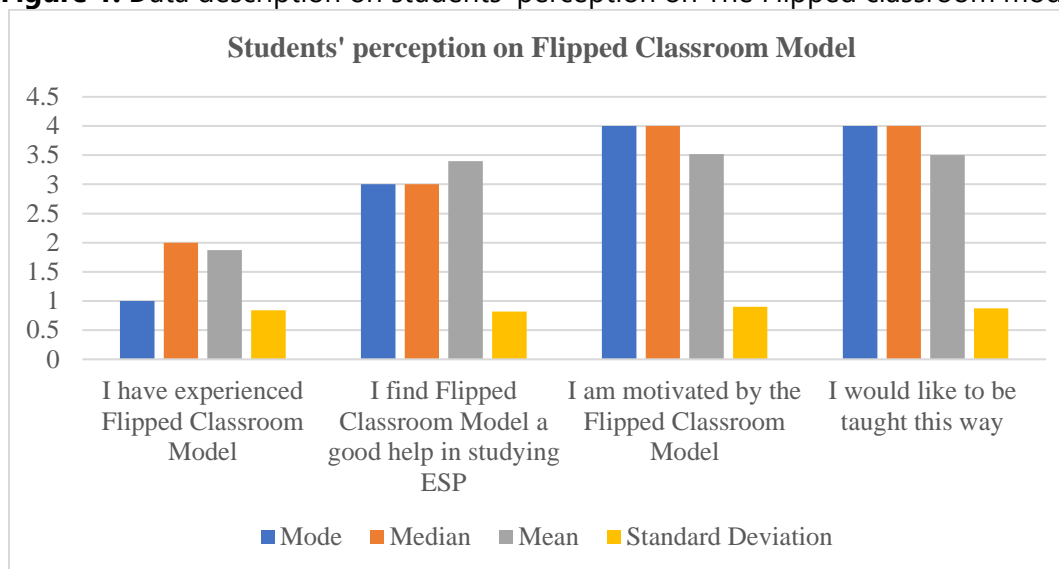
Table 3: Data description on students' perception on The Flipped classroom model

	I have experienced The Flipped classroom model	I find The Flipped classroom model a good help in studying ESP	I am motivated by the Flipped classroom model	I would like to be taught this way
Mode	1	3	4	4
Median	2	3	4	4
Mean	1,9	3,4	3,5	3,5
Standard Deviation	0,84	0,82	0,90	0,86
Reliability Spearman-Brown	0,77			

It can be seen clearly in the above chart and table that most of the participants have provided positive feedback about the implementation of the Flipped classroom model; more students have engaged in the lesson; the participants would like to be taught by the implementation of Flipped classroom model (mean 3,5); a majority of students have agreed that they were motivated by the Flipped classroom model (mean 3,4); the data collected were reliable with the Reliability Spearman-Brown value of approximately 0,77. However, the fact was that most of students haven't had any clues of the Flipped classroom model before.

Strategies for better online teaching English for specific purposes

During the action, the author implemented the Flipped classroom model accompanied by some of Internet applications such as Quizzes, Liveworksheet, wordwall, google translate, Google Classroom, classpoint.app, mentimeter. In order to know the students' points of view to the applications, the author conducted the survey. The data collected were analyzed by using SPSS. The results of the survey were clearly shown in the table below:

Table 4: Data description of strategies for a better online teaching ESP

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Quizziz	48	2	5	3,40	,818
Liveworksheet	48	2	5	3,52	,899
Wordwall	48	2	5	3,52	,899
Mentimeter	48	2	5	3,40	,818
Classpoint.app	48	2	5	3,52	,899
Google translate and Google classroom	48	2	5	3,50	,875
Valid N (listwise)	48				

Case Processing Summary			
		N	%
Cases	Valid	48	100,0
	Excluded[a]	0	,0
	Total	48	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
,872	6

Cronbach's Alpha	N of Items
,872	6

The findings show that the data were trustworthy, with a reliability score of 0,872, and that the majority of students appreciated the applications used in the Flipped classroom format. Wordwall, LiveWorksheet, and Classpoint.app were among the applications that students liked most, with a Mean value of 3,52. Google Classroom and Google Translate were ranked next with a Mean value of 3,5 respectively. Students also concurred that the applications did help them study more. They were inspired by the Flipped classroom model and eager to take part in the activities when the aforementioned applications were used. In the survey, the students also mentioned that their self-study had increased their level of engagement. This implied that a superior learning technique might be the Flipped classroom model combined with applications which also meant that the Flipped classroom model accompanied by applications can be the strategy for a better process of teaching ESP.

Discussion

The study has gained its goals of examining students' awareness of the Flipped classroom model and drawing out the strategies for teaching ESP online. According to the results, participants showed an unexpected situation for their lack of information about the Flipped classroom model. However, when they were taught by applying the Flipped classroom model, the mojority of students showed their motivation and enthusiasm in the process of studying.

Regarding the students' perception of their own self-studying which was mentioned in the section of other ideas, most of the students confessed that they hadn't had any ideas of the Flipped class room before. Nevertheless, when they were taught ESP with the teacher's implementation of the Flipped classroom model, they were more engaged in their self-studying.

In addition, most of students would like to be engaged with the applications which are available on the internet such as wordwall, liveworksheet, and Classpoint.app, Google Translate, Google Classroom, Mentimeter... Among the applications, wordwall; classpoint.app; liveworksheet were voted for the most preference. Thus, these applications should be studied by the lecturers and implemented in their teaching process.

5. Conclusion

The current study has aimed to address two research questions.

Firstly, the study tried to investigate if the Flipped classroom model enhances students' acquisition when learning English for specific purposes at Nghe An University of Economics. The findings have proved that the Flipped classroom model in teaching ESP has been effective, and the model has gained students' motivation in studying. The finding has been compatible with the previous studies of Tran (2016); Bui (2016); Nguyen, Tan & Lee (2018), and Nguyen (2018). In addition, the findings also showed that the model has rarely been used in teaching at Nghe An University of Economics. Thus, the Flipped classroom model should be used in teaching ESP at Nghe An University of Economics.

Secondly, with the help of the Internet and the implementation of the Flipped classroom model, online teaching accompanied by open teaching and learning applications brings changes of pedagogical strategies and ultimately improves the efficiency of teaching and learning foreign languages, especially ESP. Containing long reading texts, the ESP course has been considered to go well with the Flipped classroom model. Students spend their time reading the texts at home. In the class, they focus on the practice and presentation their work. To make use of the Flipped classroom model, open teaching and learning applications should be used more often. Wordwall, liveworksheet, and classpoint.app are among the applications should be taken into consideration when teaching ESP online at Nghe An University of Economics.

Finally, developing learners' competence in learning a language is now a big concern in Vietnam. The language ability is a kind of mental skill, which needs the right pedagogical strategies and training methods. Therefore, the Flipepd Classroom Model, accompanied by using open learning and teaching applications on the internet can help to boost English language teaching and gain the objective of developing learners' competence in education.

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