EFFECTS OF FLIPPED CLASSROOM ON STUDENTS' ACADEMIC ACHIEVEMENT IN LEGAL ENGLISH LEARNING CONTEXT

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Abstract

The primary focus of this study was to examine the effects of flipped classrooms on students' academic achievement in legal English learning context at Hanoi Law University. To achieve the aim, fifty second-year students participating in the study were randomly divided into experimental and control groups. The experimental group was taught legal English with the flipped learning approach while traditional teaching method was applied to the control group. A pre-test and a post-test were administered to both groups to measure the impacts of flipped classrooms on students' academic achievement in legal English. The results revealed that there were statistically significant differences in the means of the achievement test attributed to teaching methods in favour of the experimental groups. Also, survey questionnaires were administered to the students in the experimental group to identify their perceptions of the application of flipped classrooms on their legal English learning performance. The data showed that the majority of the students considered flipped classroom to be effective. It is hoped that the findings encourage instructors of English to use modern teaching strategies, in particular, flipped classroom strategy to improve the English teaching and learning process.

Keywords: academic achievement; effects; flipped classrooms; legal English students.

Introduction

In recent years, language teaching methods have witnessed rapid changes in finding out new approaches to enhance the effectiveness of the language acquisition process. Such approaches make learners become the center of learning process. It is undeniable that learning environment and teaching methods with the support of technology prove to be of great importance in helping each student learn and reach the language proficiency level. One of such modern methods and strategies is the application of the flipped classroom model, known as the inverted or reversed classroom. Flipped classroom is an unconventional model in which students gain first-exposure learning prior to class and focus on the processing part of learning such as synthesizing, analyzing, problem-solving in class (Bergmann & Sams, 2012).

In the literature, there has been a number of research on the effects of the

application of flipped classroom model in the context of higher education. Hung H (2014) indicated that flipped classroom model create opportunity for students to review learning materials before the class time. As a result, they are sure to have much more time for practices and teacher feedback in face-to-face classes leading to positive effects on the whole learning process. Similarly, Smallhorn's study (2017) showed that the inverted time, place and homework in the flipped classroom engages the students actively in the lesson rather than passive listeners in traditional one.

In the context of Vietnam teaching, flipped learning has received a great concern from educators and researchers (Bui, 2016; Tran, 2016; Tran, 2017; Tran & Nguyen, 2018), there have been limited studies on the effect of flipped classroom on students' academic achievement and students' attitudes toward flipped classroom, in particular in English classes at tertiary level. This paper, therefore, attempts to analyze and assess the impact of flipped classroom on students' academic achievement as well as their perceptions in the legal English learning and teaching context.

Definition of key terms

Flipped classroom: In the literature "flipped classroom" has been defined by different researchers. DeLozier & Rhodes (2017) defined the flipped classroom as a modern strategy in which the teachers assign lectures in different forms such as recorded or video lectures for students to review before attending class. Class time is devoted to a variety of activities including doing exercises, practices or problem-solving and group work. Alzwekh (2014) indicated that flipped classroom involves the smart use of the advanced techniques in order to cater for students' needs as well as make use of the effectiveness of modern technological tools in teaching and learning processes.

In this research, flipped classroom is understood as the inverting process of teaching and learning with the support of advanced technology, what is done at home in traditional learning is done at class; and what is done at class in traditional learning is done at home. Specifically, in the flipped classroom approach the content of each lesson created in the form of video is presented to the student outside the classroom period through technology tools, therefore class time is used for active learning activities such as group discussion, case studies or role play, etc.,

Academic achievement

Khatib & Tarawneh (2002) denoted that academic achievement refers to the proficiency of skills and knowledge of the student on a specific subject after the course. Additionally, with the help of measurement methods such as oral or written exams and assignment, the academic achievement can measure the ability of student to understand the subject matters and to apply them in carrying out the required tasks or projects. In this study, the academic achievement is measured by scores that students get in the achievement test prepared by the researcher at the end of the learning course.

Flipped classroom model in language teaching and learning
Positives of flipped classroom model

Different research in the literature has shown the positive effects of flipped classroom model on students' language learning. Shorman (2015) indicated that flipped classroom model enables students to review learning materials at home before class time through technology tools and educational websites, leaving the opportunities for their understanding of specific subjects. Asiksoy and Ozdamli (2016) shared the similar findings, showing that flipped classroom approach is a type of student-centered approach. Specifically, with the support of technological devices namely smart phones, Ipads or computers, students could actively learn new lessons at any time at any time. Students, moreover, are able to find it easier to take note as well as play back the difficult parts or to skip the parts that they are mastered in. Those strategies can improve their excitement and enjoyment in learning process. Strohmyer (2016) asserted that the application of flipped classroom strategy results in a number of benefits for both teachers and learners. For teachers, flipped classroom model provides the language teacher a valuable chance of making use of class time in guiding and helping learners. In addition, it creates a technique to evaluate the students' weaknesses and strengths in their understanding of the content through the tasks during the class time. For students, reversed classroom could enhance students' skills including the critical thinking and high thinking skills, self- learning capabilities according to their individual differences, building experiences, communication skills. Alzain (2015) added that the flipped classroom is a modern technological solution for treating academic weaknesses of students and developing levels of their skills of thinking. Furthermore, through applying the model of flipped classroom the intellectual abilities of learners can grow up. By utilizing this method learners can develop their knowledge in scientific, practical and behavioral sides. Dickenson (2016) addressed that the flipped classroom is considered as one of the active practices that enable the learner to link between what is learned and his personal life and experiences. In such process, the learner will be able to link what he/she learns with his/her intellectual behaviors, until it becomes a part of his/her personality.

Obstacles of flipped classroom model

It is undeniable that flipped classroom model achieves many benefits. Tully (2014), however, mentioned some problematic issues related to flipped classroom application. Firstly, this teaching method requires learners to have internet connected technological devices at home. Therefore, it is challenging for students who are not able to afford such devices to benefit from this strategy. Furthermore, additional working hours and efforts from teachers are necessary to follow- up students' progress as well as to be professional in integrating modern technological in education. Sharing the similar findings on obstacles when applying technological tools in the classroom, Pashler et al (2008) noted that the lack of devices and software used in recording and preparing lessons is one of the major difficulty facing educational and learning process. Moreover, the lack of teachers' skills in using the technology tools skillfully to develop teaching methods, motivation and communicating with students could be considered challenging. However, in real teaching practice those teachers can be convinced

through presenting successful practices of applying technology in the classroom comparing with the traditional method.

In the context of COVID 19 pandemic, the application of technology tools in teaching and learning is necessary. Moreover, legal English has its distinctive features which require learners to have the knowledge of both the law and English, flipped classroom creates the chance for learners to study and understand the content before attending class (Shorman, 2015). Therefore, despite its obstacles, flipped classroom proves to be suitable for legal English class. However, there has been few study focusing on how effective flipped classroom is when applied in English class, this study aims to answer the two following research questions:

1. Do flipped classroom models have an effect on the students' achievement in their overall legal English proficiency?
2. What are the students' attitude towards flipped classroom models?

Method
Participants

The study was carried out in the context of advanced legal English course at Hanoi Law University. 50 legal English major juniors – the population of this study, whose age ranged from 21 to 23, were divided equally into experimental group and control group. It was determined that students were between the intermediate level and upper-intermediate level of English proficiency. Moreover, it should be noted that those participants were required to finish two basic legal English courses before advanced legal English one.

Data collection instruments

Participants' tests: Two groups were required to do two in-class tests of legal English in a pre-test administered prior to and in a post-test following the formal instruction.

Writing portfolios: Through in-class lesson, experimental group were given opportunities to practice legal writing. Peer correction and teachers' feedback on students writing during the class time also added and reported in the portfolios.

Survey questionnaire: A questionnaire of 13 items on a 5-point Likert Scale. related to students' perceptions and impact of the flipped classroom model on learning process was delivered to controlled groups.

Procedures

The experiment was carried out in advanced legal English course for 15 weeks, each of which lasts for 135 minutes. Before the treatment, students in both groups were required to do a legal English test including reading, listening and writing skills relating to different areas of law. At the beginning of the treatment, the instructor (researcher) explained the design of the lesson, the goals and the content of the application of flipped classroom model to the experimental group. During the treatment, the students in the experimental group were asked to listen to the video lectures at home, all of which were designed and recorded by the teacher. At class time, the experimental group were given time for questions and discussion on both the content as well as the meaning and the use of legal terms in different areas of law. Specifically, for advanced learning course, learners were

required to practice writing in legal contexts such as writing letters, writing memos, which are the main points in final test, and then were asked to reflect, revise and rewrite their writings. The control group, on the other hand, were traditionally taught the content and legal terms at class time. Those students were also required to practice the same kind of legal writing as the experimental group. However, unlike the experimental group, the students in the control group were not asked to reflect, revise and rewrite their essays in class as most of in-class time was spent on giving lectures. After that, the post-test of the legal English test was administered to both groups to check whether there is any difference in terms of their performance.

Findings and Discussion
Findings
Research question 1: Do flipped classroom models have an effect on the students' achievement in their overall legal English proficiency?

Before the treatment, paired samples t-test was conducted in order to investigate whether or not there was any difference between the control and experimental groups in terms of legal English usage in listening, reading and writing skills. The result was shown in table 1.

Table 1. Paired samples t-test analysis for pre-test scores of groups

Group Statistics					
	Group	N	Mean	Std. Deviation	Std. Error Mean
Pre-test	Experimental group	25	5.760	.3452	.0690
	Control group	25	5.904	.5232	.1046

Table 1 indicated that in terms of students' overall legal English proficiency performance there was no statistically significant difference in the pre-test scores of the experimental group and the control group with a mean of 5.760 and 5.904 respectively. In other words, it was concluded that the legal English proficiency of the participants in each group was equal. One thing to be noted is that the pre-test contains different types of tasks including listening, reading and writing in new areas of law, thus students are not familiar to those terms and tasks. The scores, consequently, were at low rate.

Table 2. Comparison of pre-test, post-test scores - Control group

		Mean	N	Std. Deviation	Std. Error Mean
Pre-test group	Control	5.904	25	.5232	.1046
Post-test group	Control	7.364	25	.5179	.1036

Paired Samples Correlations

	N	Correlation	Sig.
Control group pre-test & post-test	25	.154	.461

Table 2 showed the results of paired samples t-test analysis for the pre-test and post-test scores of the control group. According to the Table 3, there was a difference between pre-test (M=5.904, SD=0.52321) and post-test (M=7.364, SD=0.51796) scores of the control group in terms of overall legal English skills performance. From the statistics, the adoption of the traditional method in the control group had an effect on ESP students' legal English performance. However, it was not considered as significant.

Table 3. Paired samples pre-test and post - test Statistics – Experimental group

		Mean	N	Std. Deviation	Std. Error Mean
Pre-test group	Experimental	5.760	25	.3452	.0690
Post-test group	Experimental	8.536	25	.6940	.1388

Paired Samples Correlations

		N	Correlation	Sig.
Experimental group	Pre-test & Post-test	25	-.114	.588

Table 4. Comparison of pre-test, post-test scores - Experimental group

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pre-test Post-test	-2.7760	.8095	.16	-3.11	-2.44	-17.1	24	.000

A paired-samples t-test was also conducted to compare the mean scores of pre-test and post-test of the experimental group. Table 3&4 showed that there was a statistically significant difference between pre-test (M=5.760, SD= 0.3452) and post-test (M=8.536, SD=0.6940) scores of experimental group with regard to their legal English performance. The results indicated that the application of flipped classroom model was found to significantly affect the students' legal English level.

Table 5. Comparison of post-test scores - Experimental and Control groups

		Mean	N	Std. Deviation	Std. Error Mean
Post-test group	Experimental	8.536	25	.6940	.1388
Post-test Control group		7.364	25	.5179	.1036

The statistics of table 5 showed that there was a statistically significant difference between the post-test scores of the control group (M=7.364,

SD=0.5179) and the experimental group (M=8.536, SD=0.6940). This indicated that students who received instruction through portfolio technique were significantly better at writing than those who received the traditional instruction in the control group.

Research question 2: What are the students' attitudes towards flipped classroom model?

As can be seen from the table 6, flipped classroom model is not familiar to almost students with 88% of surveyed participants admitted having no prior experience of it. The application of flipped classroom concept in advance legal English course is quite new to them.

Table 6. Familiarity of flipped classroom

Q0 I have a prior experience of flipped classroom					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	22	88.0	88.0	88.0
	Yes	3	12.0	12.0	100.0
	Total	25	100.0	100.0	

Table 7 demonstrated students' attitudes towards the application of flipped classroom model using a Likert scale with five options ranging from "strongly agree – SA (5) to "strongly disagree" - SD (1).

Table 7. Students' attitude towards flipped classroom

Items	Mean	SD
I have a positive attitude towards flipped classroom after the unit	4.04	.539
The flipped classroom		
Enabled me to be more responsible in learning	3.76	.779
Made me engaged with the activities	4.00	.645
Increased motivation to learn legal English	4.32	.557
Encouraged me to be an active learner.	3.80	.866
Improve my language proficiency	3.68	.945
Helped me to understand the content easily	4.12	.833
Allowed for self-pace learning	3.80	.913
Allowed for interaction and communication	3.84	.898
Promoted cooperation among students	4.00	.645
Provided a good learning experience	3.73	.751
I have problem in having and using electronic devices	3.32	.852
I feel an increased workload that is stressful	3.88	.666
I feel confused about how to activate the provided classroom materials	2.52	.823

As seen from Table 7, the majority of participants in the experimental group indicated their positive attitude towards flipped classroom model with the high mean of 4.04. At the same time, most of the statements relating to the positive effects of flipped classroom gained the highly rate of agreement ranging from the

mean of 3.68 to 4.32. This statistic showed that the application of flipped classroom is beneficial to students' learning in terms of raising motivation, autonomy and responsibility and language proficiency.

Regarding the difficulties when applying flipped classroom model, most of the students surveyed agreed that they felt more stressful and had problems in using electronic devices with the mean of 3.88 and 3.32 respectively. Moreover, half of students in experimental group felt confused about activating the provided classroom materials.

In general, the students expressed a positive attitude towards the application of flipped classroom with the high mean ranging from 3.32 to 4.32 (strongly agree (5) to "strongly disagree" (1)).

Discussion

This study aimed to investigate the differences between the students' academic achievement of the experimental group applied flipped classroom model and the control group taught by the traditional method as well as and to identify students' views in the experimental group towards the flipped classroom. The data from the pre-test, post- test and survey questionnaires were then gathered and analyzed through the SPSS program. The statistics indicated important main findings.

Concerning the first research question, the results of the post-test revealed that students in the experimental group were significantly better at their academic achievement in legal English than those who received the traditional method instruction in the control group. From the statistics, it can be seen that the current study shares similar findings with the previous ones such as the studies carried out by ALzwekh (2014) and Almusawi (2014) on the impact of flipped classroom model on both content and language teaching and learning in comparison with the traditional teaching method. Those studies pointed out a variety of recommendations, including: the need to encourage the university instructors to use the flipped classroom strategy and holding seminars, courses, and training workshops on applying the flipped classroom strategy.

In response to the second research question, survey questionnaires were administered in order to examine students' views on the flipped classroom strategy. The results showed that the majority of the participants expressed their positive attitudes towards the flipped classroom application in legal English course. Most of the statements received a high rate of agreement among the participants with the high mean ranging from 3.32 to 4.32. This study shared similar findings with other studies (Hung, 2015; Moffett (2014); Tune et al (2013), indicating that the students were motivated self-learning environment, engagement in class activities and responsibility in learning. However, the negative effects of flipped classroom concerning the problems in having, using the technology as well as increasing the stress level received the high rate of agreement with the mean of more than 3.00.

Flipped classroom is such an effective instructional technique that its application affects students' autonomy in learning process. This finding was consistent with the previous studies, which indicate that students gain higher autonomy in flipped classroom (Benson & Voller, 2014; Chen, 2017; Zainuddin & Perera, 2017; Han, 2015). This is probably because the flipped classroom

creates opportunity for students to develop their independence in learning rather than the traditional classroom. It can be denied that the knowledge is not only the main goal to teach, but how to learn is another important thing learners should be provided. Students, therefore, had more chances to manage their own studying. In other words, they take more responsibility for their independence learning. Teachers in English language classes, in general and legal English ones, in particular should make use of it instead of traditional teaching method to motivate, thus, enhancing students' academic achievement.

Conclusion

The study demonstrated the positive effects of the flipped classroom model on students' academic achievement, which was shown by much higher scores of the post-test than the pre-test. In addition, the students in the experimental group expressed their satisfaction on the application of flipped classroom in terms of different criteria. However, there are several limitations to the current study. Firstly, the factors including the age, gender of the participants, which were not taken into consideration in this study, can be used in further studies to investigate whether they neutralize the effects of the flipped classroom model on students' academic performance or not. Secondly, the size of the participants in this study is rather small. The results, to some extent, cannot reflect the behavior of a larger population. Therefore, a greater number of participants should be involved in future studies to increase the generalization of findings. Lastly, the study only investigated the effect of flipped classroom model on students' academic achievement during a 15-week course, not specifically the performance of separate sub-skills including listening, speaking, reading and writing skills. In order to have a detailed insight into the usefulness of the flipped classroom application, further research should be carried out to measure the degree of its impact on those sub-skills over a longer period of time.

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