Effect of the Flipped Classroom Model on Chinese English-majored College Students in International Business Law

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Abstract
This paper reviewed a one-term experiment on the flipped classroom model in teaching the curriculum International Business Law to 120 second-year English-majored undergraduate students majored the business English from Yangtze University as participants. Participants in this study consisted of 60 English-majored undergraduate students in the control group (CG) and 60 English-majored undergraduate students in the treatment group (TG). The process of the flipped classroom model in teaching the course International Business Law was divided into the three parts: outside of the flipped classroom, inside of the flipped classroom and outside of the flipped classroom. The results showed that 1) compared with a teacher-dominated approach for CG, the flipped classroom model in teaching the course International Business Law for TG did a better job in enhancing students’ ability applied in International Business Law; 2) there were significant differences between males in CG and TG, and females in CG and EG.

Keywords: The Flipped Classroom, English-majored, International Business Law
1. Introduction

The new teaching and learning model, the flipped classroom is one in which lectures are presented as homework outside of class in online videos so that class time is reserved for engaging directly with the materials (Judy E. Gaughan, 2014). Different from traditional learning, the flipped classroom is a special educational environment for gaining in popularity among educators all over the world. In a flipped classroom, students learn the course lectures (i.e. through online videos, course materials, etc.) before they come to class, and spend the bulk of classroom time asking questions and being engaged in interactive discussions (Hiroyuki Obari and Stephen Lambacher, 2015, p. 434). The flipped classroom approach was started in 2006 in Colorado, and the model basically refers to the idea that the lectures and explanations would no longer be done in class but at home, leaving what was previously treated as homework to be done in the class time (Bergmann & Sams, 2012). The flipped classroom approach is student-centered teaching and learning method. The flipped classroom agrees with the theory of Constructivism. According to the theory of Constructivism, knowledge is not taught but is learned by the learner himself through constructing the new knowledge on the basis of old knowledge, under certain settings, with the help of others, such as the teachers or learning partners, utilizing certain study resources. So the student is the center of teaching and student-centered methodology should be used. That is to say, the student is the center of teaching and the teacher works as the organizer, facilitator and motivator, utilizing setting, cooperation and dialogue to motivate students’ interests, activities and creativeness. Before the flipped classroom, students can know the learning tasks and they can learn to complete the learning tasks by watching the videos made by the instructors to construct the new knowledge. And in class, the instructors organize and guide the students to cooperate with each other to discuss the questions in their learning and what they have learned, so students can gain help of the teachers or learning partners.

2. Literature Review

According to the theory of Constructivism, knowledge is not taught but is learned by the learner himself through constructing the new knowledge on the basis of old knowledge, under certain settings, with the help of others, such as the teachers or learning partners, utilizing certain study resources. So the student is the center of teaching and student-centered methodology should be used. That is to say, the student is the center of teaching and the teacher works as the organizer, facilitator and motivator, utilizing setting, cooperation and dialogue to motivate students’ interests, activities and creative. Teachers should meet the students’ needs. The flipped classroom model agrees with the theory of Constructivism.

According to Bergmann & Sams (2012), a flipped classroom can be described as a setting where that “which is traditionally done in class is now done at home, and that which is traditionally done as homework is now completed in class” (p. 13). The flipped classroom model changes the view of the classroom from being a knowledge station to being a place for student engagement and formative assessment of students’ progress (Kang, 2015).

There are benefits and challenges to adopt the flipped classroom model in education. Benefits to implementing the flipped classroom model include students learning at their own pace,
reinforcing the teacher-student relationship (Bergmann & Sam, 2012) Studies by Aljumah (2012) and Al-Kathiri (2015) showed students benefitted from the use of technology in learning English. On the other hand, there are some challenges with accompanying the implementation of the flipped classroom model such as students having difficulty adjusting to being active learners or neglecting to do the out-of-class work (Huelskamp, 2015). Another challenge is that teachers are not willing or capable of changing and adopting the use of technology (Educause Learning Initiative, 2012).

The flipped classroom approach is spread all over the world. Allison J. James et al. (2014) studied application of the flipped classroom in maritime education. Eunicia TAN et al. (2015) evaluated the relative acceptability of the flipped classroom approach compared with traditional didactics for in-house teaching in emergency medicine and found that ninety-eight per cent (48/49) of respondents preferred the flipped classroom over the traditional approach. Tracey Muir & Vince Geiger (2016) reported that they made a case study of a grade 10 mathematics class by using a flipped classroom approach and found that the teacher and students were positive about their experiences with a flipped classroom approach and that students were motivated to engage with the teacher-created online mathematics resources. David González-Go´mez et al. (2016) evaluated the effectiveness of a new teaching methodology in a general science classroom in the Flipped Learning Model. Vindya Perera & Nelun de Silva (2017) studied Flipped Classroom Model for teaching and learning medical microbiology and they found that flipped classroom model was shown to be more effective than traditional lectures when the average marks in the final assessment were compared. The above foreign researchers studied application of the flipped classroom in the fields of natural science. Samah Zakareya Ahmad (2016) studied the use of the Flipped Classroom Model to develop Egyptian EFL students’ listening comprehension and found that the flipped classroom had a significant effect on the listening comprehension of Egyptian EFL students. Vasiliki Aidinopoulou and Demetrios G. Sampson (2017) focused on the implementation of the flipped classroom model in social studies (history teaching and learning) in primary school. Nurnia et al. (2017) discussed how to develop students ability to work on a writing project by means of a flipped classroom and their study showed that teaching should promote less teaching and more learning. In China, there were studies on the flipped classroom model. Pan Bingchao (2015) studied effects of the flipped classroom on 127 undergraduate students in learning the course: Design and production of multimedia courseware and he found the flipped classroom model could stimulate and maintain college students' learning motivation, cultivate college students' autonomous learning and cooperative learning ability. Kaushal Kumar Bhagat et al. (2016) investigated the effects of flipped classrooms on learners with different achievement levels in learning mathematics concepts. And they found a significant difference in the learning achievement and motivation between the experimental and control groups with students using the flipped classroom performing better and a significant difference in the performance of low achievers in the two groups. Feng-Kuang Chiang & Chen Chen (2017) examined the three-year application of the modified flipped classroom model in a postgraduate course on learning sciences and they found that the modified flipped classroom can effectively bring out students’ initiative and improve both their learning satisfaction and empirical research abilities.
From the above information, we may find that there are few studies on the flipped classroom model on English-majored undergraduate students in International Business Law. This paper will investigate the effects of the flipped classroom model on English-majored undergraduate students in *International Business Law*.

### 3. Methodology and Data Collection

#### 3.1 Research Design

This study included two quantitative components (two tests related to the course *International Business Law*) to provide the information on English-majored undergraduate students’ scores of *International Business Law* before and after trained by the flipped classroom model, and a qualitative component (open-ended interview) to provide the perceptions of English-majored undergraduate student towards the use of flipped classroom model. The following research questions were answered in this study:

1) As a result of implementing the flipped classroom model, were there any significant differences between CG’s and TG’s improvement in *International Business Law*?

2) Were there any significant differences between male English-majored undergraduate students and female English-majored undergraduate students in CG and TG.

#### 3.2 Subjects

In September 2016, 120 second-year English-majored Chinese undergraduates majored agriculture, plant protection, chemistry from Yangtze University were volunteers in this study. 120 freshmen, taught by the same male instructor during the whole academic term (August 29, 2016 to December 30, 2016), were 69 females and 51 males, their average age 19, Chinese as their first or mother language. All 120 subjects taught by the 38-year-old male *International Business Law* instructor were divided randomly into two groups: 60 participants as the Control Group (CG) with the traditional undergraduate translation method and 60 participants as the Treatment Group (TG) with the flipped classroom model. Both CG and TG had the similar level of education background, family background, personality and life experiences, which was to say, their overall learning and cognitive abilities were almost equal.

#### 3.3 Instruments

The instruments utilized in this study were tests on *International Business Law* applied ability and an interview with undergraduate students from TG on flipped classroom model.

**International Business Law applied ability pre-test**

All the 120 English-majored undergraduates were attended the *International Business Law* applied tests (total100) at 15:30-17:30 on August 30, 2016 in one classroom to gain students’ scores on *International Business Law* applied ability in CG and TG before the experiment. All the 120 English-majored undergraduates were required to complete the tests in two hours.
The International Business Law applied ability tests materials were taken from 2014 National Legal English Certificate Test.

International Business Law applied ability post-test

All the 120 English-majored undergraduates were attended the International Business Law applied ability tests (total 100) at 15:30-17:30 on December 30, 2016 in one classroom to gain students’ scores changes in International Business Law applied ability between CG and TG after the experiment. All the 120 English-majored undergraduates were required to complete the tests in two hours. The International Business Law applied ability tests materials were taken from 2015 National Legal English Certificate Test.

3.4 Data Collection and Analysis

Two tests on International Business Law applied skills or ability before the research experiment (August 30, 2016) and two tests on International Business Law applied skills or ability (December 30, 2016) were conducted to compare the scores changes between the two groups (CG and TG) of English-majored undergraduate students in the course. International Business Law. Comparison of Means was adopted to compare two groups of English-majored undergraduate students’ average scores of their pre-test and post-test on the basis of samples. And the independent sample T-test was adopted to examine if there were significant differences between CG and TG before the experiment and after the experiment. Also the independent sample T-test was adopted to examine if there were significant differences between male and female graduate students in CG and TG.

4. Process of the Flipped Classroom Model in International Business Law

International Business Law (English version) published by University of International Business and Economics Press as the textbook was used in teaching International Business Law for English-majored undergraduates in CG and TG. In the experiment, participants in the control group were instructed by the traditional International Business Law model (teachers explaining the law of business organizations, law of international sale of goods, law of international intellectual property rights, law of international commercial disputes resolution, the law principles and law nouns in International Business Law, then students listening to teachers’ International Business Law instruction). However, participants in the treatment group were instructed by the flipped classroom model. The flipped classroom model in International Business Law in this study was divided into three parts. The first part was outside of the flipped classroom in translation; the second part was inside of the flipped classroom on International Business Law; and the third part was outside of the flipped classroom on International Business Law.

The instructor’s activities and students’ activities were included in the three parts of the flipped classroom model in International Business Law teaching and learning. The first part, outside of the flipped classroom on video, the International Business Law instructor needs analysis and design on International Business Law teaching, the content selection and video production on International Business Law teaching, creation of autonomous learning situation and design of strategies in autonomous learning, preparation of International
Business Law teaching in class. During the first part, the International Business Law instructor needs select the International Business Law teaching content and produce a short International Business Law teaching content video such as 15 minutes’ video on The Warsaw Convention 1929 and 15 minutes’ video on The Montreal Convention 1999 according to the International Business Law teaching arrangement. The first part, outside of the flipped classroom on International Business Law, the students’ activities include understanding International Business Law learning tasks, watching International Business Law teaching videos (such as 15 minutes’ video on The Warsaw Convention 1929) made by the course International Business Law instructor to complete the course learning tasks, self-test the course knowledge (such as carriage of goods by air) before the class and summary of the course International Business Law learning through watching the International Business Law teaching videos before the class. The students can communicate with the International Business Law instructor about the course International Business Law learning via the communication platform if students want to ask the instructor questions related to International Business Law. The second part, inside of the flipped classroom on International Business Law, the instructor create the International Business Law teaching and learning environment, then organize and guide students learning International Business Law through independent study, collaborative learning, achievement exchange and reports. The instructor can organize 3-4 students per group according to their wills and guide every group cooperative learning or argument learning such as solving their International Business Law learning problems by discussion or by detailed law case discussion. Then the representative of every group reports his or her group’s International Business Law learning achievement. Inside of the flipped classroom in teaching International Business Law, the instructor not only organizes and guides the students’ learning activities but also joins in their discussion to scaffold students’ International Business Law learning. The third part, outside of the flipped classroom on International Business Law, the students need write their lesson summary and evaluation about their learning in class, and give their lesson summary and evaluation to their International Business Law instructor; then the instructor gives students the comprehensive evaluation and feedback of their International Business Law learning.

5. Results

The results in this study included three parts. The first part was International Business Law test results of pre-test and post-test between the control group (CG) and the treatment group (TG). The second part was whether there were significant differences between males and females, as CG with a traditional International Business Law teaching model compared to TG with the flipped classroom translation model. The last part was that responses to the interview on the flipped classroom in International Business Law teaching and learning from English-major undergraduates in TG.

Effects of the flipped classroom model instruction and traditional instruction on English-major undergraduates’ International Business Law performance

From Table 1, we could see English-major undergraduate students’ International Business Law performance from CG and TG before and after the experiment. The results from Table 1
show tests’ scores between CG and TG taught by different methods in the pre-tests’ scores between CG and TG and their post-tests’ scores between CG and TG. In the pre-tests of *International Business Law* between the two groups (CG, TG), there was no significant difference ($t=1.163$, $P=.242$) between CG ($M=59.500$, $S=9.493$) and TG ($M=59.017$, $S=8.588$). However, in the post-tests, a significant difference was found between CG ($M=60.200$, $S=9.174$) and ($M=61.767$, $S=7.849$) in the *International Business Law* tests, ($t=-2.128$, $P=.038$). After the instruction of the flipped classroom model in *International Business Law*, the subjects’ mean scores of TG ($M=61.767$) were higher than that of the participants’ mean scores of CG ($M=60.200$).

Table 1. Results of English-majored undergraduates’ *International Business Law* scores of pre-test and post-test

<table>
<thead>
<tr>
<th>Tests</th>
<th>Groups</th>
<th>CG (N=60)</th>
<th>TG (N=60)</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>S</td>
<td>M</td>
<td>S</td>
</tr>
<tr>
<td>Pre-test</td>
<td></td>
<td>59.500</td>
<td>9.493</td>
<td>59.017</td>
<td>8.588</td>
</tr>
<tr>
<td>Post-test</td>
<td></td>
<td>60.200</td>
<td>9.174</td>
<td>61.767</td>
<td>7.849</td>
</tr>
</tbody>
</table>

$M$ stands for Mean; $S$ stands for standard deviation; *$P<.05$; **$P<.01$.

**Results of the T-Test about Males and Females in CG and TG taught by different translation approach**

From Table 2, there were significant differences between males and females in the two groups: CG and TG. Males ($P=.04$) suggested that there was the significant difference between CG and TG in their *International Business Law* applied ability after the flipped classroom and females ($P=.03$) suggested that there was a significant difference between CG and TG in their *International Business Law* applied ability after the flipped classroom model instruction.

Table 2. Results of the T-Test about Males and Females in CG and TG taught by different translation approach

<table>
<thead>
<tr>
<th>Gender</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>T(two-tailed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probability</td>
<td>.04*</td>
<td>.03*</td>
</tr>
</tbody>
</table>

*P<.05; **P<.01.
6. Discussion

The authors in this study want to investigate the answers to the three questions. One of the purposes in this study is to investigate if the International Business Law instruction through the flipped classroom model can improve English-majored undergraduates’ International Business Law applied skills and ability. Improvement of participants’ International Business Law applied skills and ability in TG shows the important role of the flipped classroom model played for English-majored undergraduates’ International Business Law learning.

According to the results in Table 1, we find that subjects in this study trained by the different International Business Law instruction methods: the traditional method for CG and the flipped classroom model for TG, subjects’ scores in two groups (CG and TG) were improved. However, the TG’s scores were higher than that of the CG’s, which means that the flipped classroom model can improve English-majored undergraduates’ International Business Law applied skills and ability in TG trained by the new teaching method. The flipped classroom model encourages students to watch the International Business Law teaching videos made by the instructor to complete their learning tasks before the class to learn the International Business Law knowledge by themselves, and they are organized or guided by their International Business Law instructor to share what they have learned or to discuss their questions with their classmates in groups in class to get help from the classmates or the instructor, after class they can get their comprehensive International Business Law evaluation from their instructor, then their International Business Law applied skills and ability can be improved by the training of the flipped classroom model. We may find that the flipped classroom model agrees with the theory of Constructivism to encourage students learn knowledge by themselves (according to the theory of Constructivism, knowledge is not taught but is learned by the learner himself through constructing the new knowledge on the basis of old knowledge, under certain settings) and the flipped classroom model, provides students help from their classmates or their instructor, agrees with the theory of Constructivism (with the help of others, such as the teachers or learning partners), and utilizes certain study resources (such as teaching videos, online resource).

After trained by the flipped classroom model, most of male and female English-majored undergraduate students in TG successfully learn how to improve their International Business Law applied skills and ability by completing their learning tasks and they discuss their questions related to International Business Law with their groups or their instructor to get help from them, so they show better in learning International Business Law, compared with male and female English-majored undergraduates in CG. And there are significant differences between males and females in CG and TG. Male and female English-majored undergraduate students in TG could have the opportunity to discuss the problems or difficulties with their group members or their instructor, so their group members or their translation instructor help them solve the problems or difficulties they had during their International Business Law learning process, which would provide chances for English-majored undergraduate students in TG to improve their International Business Law applied skills and ability because of their International Business Law learning problems or difficulties being solved.
6.1 Limitations and Suggestions for Further Research

Though the present study has investigated a survey of the flipped classroom model among the 60 English-majored undergraduate students in International Business Law teaching and learning, there are still some limitations in the study. There are limitations in this article.

Firstly, time limitation (only 4 months from August 29, 2016 to December 30, 2016) and other practical restrictions such as the subjects in the study consisted of only 120 English-majored undergraduate students in one university are needed to be broadened in further research.

Secondly, the instruments used in this study to investigate the English-majored undergraduate students’ International Business Law instruction involve two tests to measure English-majored undergraduate students’ International Business Law applied skills and ability. The study would be much better, if it were combined with other instruments such as verbal report. More instruments should be used in investigating in the further research.

Finally, subjects in this study were the English-majored undergraduate students in only one university. The study will be better if more subjects from other universities can be participated in the experiment.

Despite of the restraints of the study, we hope that it can offer some guidelines for further research of the flipped classroom model on English-majored graduate students’ International Business Law.

7. Conclusion

This paper investigated an experiment (August 29, 2016 to December 30, 2016) on effects of the flipped classroom model in teaching and learning International Business Law on 120 second-year English-majored undergraduate students. Participants in this study consisted of 60 English-majored undergraduates in the control group (CG) and 60 English-majored undergraduates in the treatment group (TG). The results showed that 1) compared with a teacher-dominated International Business Law teaching and learning approach for CG, the flipped classroom model for TG did a better job in enhancing students’ International Business Law applied skills and ability; 2) There were significant differences between males in CG and TG, and females in CG and TG. This study is a worthy try on the flipped classroom model in International Business Law. We hope this paper could provide the information for the future research on International Business Law teaching and learning.

References

Aljumah, F. H. (2012). Saudi learner perceptions and attitudes towards the use of blogs in teaching English writing course for EFL Majors at Qassim University. English Language Teaching, 5(1), 100. https://doi.org/10.5539/elt.v5n1p100


Gaughan, J. E. (2014). The flipped classroom in world history. *The History Teacher, 47*(2), 221-244.


James, A. J., Chin, C. K., & Williams, B. R. (2014). Using the flipped classroom to improve student engagement and to prepare graduates to meet maritime industry requirements: a focus on maritime education. *WMU Journal of Maritime Affairs, 13*(2), 331-343. [https://doi.org/10.1007/s13437-014-0070-0](https://doi.org/10.1007/s13437-014-0070-0)


Samah Zakareya Ahmad. (2016). The Flipped Classroom Model to Develop Egyptian EFL Students’ Listening Comprehension. *English Language Teaching*, 9(9):166-178. dx.doi.org/10.5539/elt.v9n9p166