Explorations in Flipped Classroom and College Student's English Learning Anxiety

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Abstract

Flipped education has gained much attention in the last few years in Taiwan. It was suggested that educators should consider this teaching method due to the increase in learner's productivity and information retention. This study focuses on how college students' English learning anxiety could be affected if teachers were to apply some flipped classroom teaching approaches. Three hundred and eighty college students participated in this study by taking an online or paper-and-pencil type survey. They were asked to respond to a 7-point Likert scale questionnaire. Two hypotheses and two research questions were posted. Descriptive statistics, Pearson correlation, and multiple regression were computed to determine the answers to the research questions. The findings showed that students' anxiety decreased when learning English and was positively correlated at a significant level if teachers applied some flipped classroom teaching approaches. Furthermore, students seem to be neither less likely nor actively interacting with teachers in English classes when their anxiety level was high. Also, "poor grade" was found to be the most significant cause of students' learning anxiety, followed by "being asked to answer the questions," "using English to communicate," "giving opinion on something," and "deficiency in English ability." Lastly, four teaching approaches are found favorable to decrease students' learning anxiety from students' perspective in this present study, such as take English classes outside the regular classroom, engage in group activities, interact with students more, and provide movies and/or videos for English learning. The findings of this study suggest all English educators should reconsider and reexamine the effectiveness of traditional teaching ways. The paper provides many pedagogical suggestions for effective English education from a flipped education perspective. Future research suggestions and the limitations of this study are provided in the end of this paper.

Keywords: flipped classroom, learning anxiety, flipped education, English learning

探討大學生英語學習焦慮與翻轉課室之研究

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摘要

翻轉教育過去幾年在臺灣教育界裡蔚為風潮,教育者也被建議應該考慮翻轉教學致使提昇學習者的效率性及對訊息的強化性。本研究旨在探討大學生的英語學習焦慮是否可以因為老師使用翻轉教室的一些教學方式而受到改變。380位大學生透過紙筆或網路問卷方式參與此次研究,每位受測者填寫回應一份七點的李克特式量表。本研究提出兩個研究假設和兩個研究問題,量性統計方式分別進行描述性統計、皮爾森相關,和迴歸分析來驗證研究結果。研究顯示,英語學習焦慮的下降與英語教師使用翻轉教學方式呈現顯著正相關,同時,當學生感到焦慮時,他們似乎比較不願意與老師在英語課堂上互動。還有迴歸分析結果顯示「成績不好」最讓他們感到焦慮,接著是被「指定回答問題」、「用英語溝通」、「用英語表達意見」以及「英語能力不足」。最後,從學生的問卷顯示英語教師可以多運用下列的教學模式以降低學生的學習焦慮,例如:把英文課帶出教室上課、進行分組學習、在課堂中跟學生互動、利用看電影或影片來學習英文。本研究的發現建議所有英語教育者應該重新思考並再次檢視傳統式的教學模式其效率性為何,文末從翻轉教育的觀點提出有效的英語教育教學建議,並且針對本研究的限制及未來研究建議給與陳述說明。

關鍵詞:翻轉教室、學習焦慮、翻轉教育、英語學習

I. Introduction

A traditional teaching approach more likely uses one-way lecture. Teachers lecture in class and students listen. Often, students are passive with information being crammed into their heads. A teaching mode like this is not as effective as it used to be. The answer is simple. Students are accustomed to interacting with electronic devices at all times. The author, as a front-line educator, also has observed that students' attention span is getting shorter and shorter, not to mention they are very easily distracted while the teacher is lecturing. A scene like the following is commonly seen—students lower their heads and sneakily phub their smart phones without listening attentively. This may not be such a serious issue for some theoretical-based courses, but in an English language class where English is a tool for gaining better communication skills, this becomes a much more serious problem. Without actively participating or interacting with teachers, students will not successfully meet the benchmark of English proficiency (沈立言, 2014). If students nowadays are so into mobile devices, it stands to reason that they would digest educational content delivered by a flipped classroom teaching approach as well.

Both in the United States and Taiwan, flipped classroom has made a significant change in a positive way. According to a study conducted in America (Window & Network, 2012), 453 teachers responded after converting their classrooms to flipped mode, remarkable outcome was reported. Eighty-eight percent of the teachers said they were satisfied with their teaching quality, 67% of the teachers reported that their students' academic performance has improved, moreover, 80% of teachers noticed that students' learning attitudes had improved significantly. Furthermore, 99% of teachers expressed their willingness to continue using flipped classroom as a teaching model again in the future. In southern Taiwan, Hung's (2015) study showed a similar impact from students' perspective. Hung did research with a group of college students and discovered that in a flipped classroom, college students' performance, learning attitude, and level of participation in English learning all showed significant outcome. These findings and reports certainly promote interest in conducting this study with college students in central Taiwan. Though the school where the author currently is employed provides a great elearning platform to all teachers, the author herself also utilizes the e-devices to teach by using YouTube, Ted.com, and more on-line resources. However, something was still missing even with all these great resources and teaching variety. This phenomena observation led the author to ponder what other possible factor might hamper the effectiveness of flipping the teaching-and-learning way.

A teacher and a language learner realized one factor that closely linked with learning outcome was "learning anxiety." As Harry Sullivan stated, "The first of all learning is, I think, beyond doubt in immediate connection with anxiety" (cited in Miller, 1964). Therefore, English teachers need to learn how to best integrate technology into the teaching-and-learning process

because whether or not it is used as well as how it is used matters, especially for this generation. Moreover, it is essential to understand the challenges of applying flipped teaching approaches and the causes that increase students' learning anxiety. The purpose of this research is to explore how college students' English learning anxiety could be affected if teachers were to apply some flipped classroom teaching approaches. Furthermore, analyzing the causes of students' anxiety and discussing if using more flipped teaching methods can lessen this anxiety will be included.

II. Review of Literature

1. The Rise and Concept of Flipped Classroom

The idea of flipping the classroom is not new; flipped education has become a new trend in the worldwide educational realm (Huang & Hong, 2016). The flipped concept has gained attention due to advances in technology and increased ubiquitous access to computers and different types of mobile devices (Davies &West, 2013). In a flipped classroom, students are not only seeing words and images, but also learning autonomously, freely, and readily. Multitechnology devices provide useful supplementary access that can encourage students to learn actively. This learning approach is known to make students self-directed learners instead of solely relying on teachers' instructions. The flexibility of computer-based instruction can also be adapted to different students with different needs. Benefiting from the advances in technology, it allows teachers to provide online instructional videos and assessment systems (Friedman & Friedman, 2001).

The concept of flipping the classroom is simple, instead of giving a lecture in class, students are expected to use the video resources along with other supplementary materials to learn and complete the tasks on their own at a convenient time, location, and specific learning pace (Khan, 2012). By flipping the traditional way of teaching, students have more flexible ways to prepare themselves, so they won't feel they are being left behind or feel anxious, especially when they encounter difficulties in classroom discussions. Allowing individual students to meet their individual learning needs is one important key feature of flipped education. Learning is not limited to taking place in the classroom. On the other hand, students can pace themselves and direct their efforts based on their own individual needs. Surely, students are expected to take responsibility for their own learning. As Davies, Dean, and Ball (2013) pointed out, in a flipped classroom, direct instruction was blended with constructivist learning pedagogies so that individualized differentiated learning could be facilitated. As for teachers, flipped teaching approaches allow them to use class time in different ways, resulting in teaching that is more interesting and effective. Teachers would therefore have plenty of quality time to meet individual student's needs, one-on-one (Chen & Kao, 2016). In a flipped classroom, the teacher's role is seen as a course designer, the teaching approach shifting from structuring inclassroom time to providing learning resources asynchronously (Davies et al., 2013).

Osman, Jamaludin, and Mokhtar (2014) indicated students who were taught in a flipped

classroom achieved higher scores on quizzes and examinations in comparison to those who were instructed in a traditional classroom. This outcome could be interpreted that flipped teaching gave students more time to review and solve problems. Students tend to digest well what they learned and present better in the end. Another study carried by Roshan (2012) also found a significant positive effect on students' feedback from receiving help in a flipped classroom, especially for those who have high anxiety in learning. Mainly, the teacher flipped the way he/she used to teach, instead, students watched videos at home, and brought back questions to discuss in the classroom. In this learning mode, students have less stress, and have more confidence. The most desirable outcome was student satisfaction being higher because they felt more supported and had their questions answered. They got more attention from the teacher than ever before. Furthermore, students reported they enjoyed learning from their classmates (Roshan, 2012). This is also another flipped concept, learning from peers.

2. Characteristics of Flipped Classroom

Two main techniques are used in a flipped classroom, one is "interactive group learning activities inside the classroom," and the other is "direct computer-based individual instruction outside the classroom" (Bishop & Verleger, 2013). There are false beliefs that a flipped classroom just has students watch videos on the internet. Effective learning won't take place if the learning journey stops there. Students need to become active learners so a significant positive change can be shown (Chen & Kao, 2016; Roshan, 2012). Bergmann, Overmyer, and Wilie (2011) highlighted some effective characteristics in a flipped classroom. First, the learning attitude of students was transformed from passive to active. Second, the smart use of technology facilitated effective learning. After that, class time and homework time is interchanged in a flipped classroom so personalized instruction can take place. Also, providing a real-world scenario and context is an important way to make flipped teaching-learning work. Finally, central to a flipped education approach is the goal of developing students' critical thinking and ability to solve problems.

Some criticisms were raised, such as saying the teacher's role is replaced in a flipped education. As a matter of fact, a flipped classroom does not replace the teacher's significant role, just as the student watching videos cannot replace homework. The key goal for a flipped classroom is to make the class time more productive and redefine the relationship between teacher and student. In addition, flipped classroom allows students to inquire and cooperate when they return to the regular classroom. They achieve mutual growth through learning from each other. Teachers have more flexibility when lecturing. Teachers consistently observe how students apply what they have learned. It may be fair to conclude, flipped classrooms also shift the culture of "teacher-centered" to "student-centered." The leading role in the classroom is no longer the teacher alone but students. Flipped classroom aims to reinforce student's self-

learning. In other words, students have more control of their learning as well as take responsibility for their learning (Fulton, 2012; Roshan, 2012).

However, there are some downsides to using a flipped classroom approach. The teacher's role changes, and he or she bears a heavier load to prepare lessons. Honestly, the teacher needs to spend more time and access varied resources to provide relevant videos for students to watch at home. That doesn't include the time spent when teachers make their own videos. Another factor that could hamper teachers' willingness to shift their teaching mode to a flipped approach is lack of knowledge or skills to deal with technology problems. Therefore, some educators are not as supportive as expected. Bloom and Hanych (2002) stated that the learning outcome in a traditional classroom was more efficient for memorization in learning and believed the flipped method might decrease teacher-student relationship. Even though the effectiveness of flipped education has been argued against in several ways, the strength and excitement of using flipped teaching-learning ways were repeatedly reported in a very positive significant way (Huang & Hong, 2016; Schell, 2013). Will flipped classroom teaching approaches reduce student's learning anxiety? This is the core interest of this study.

3. English Learning Anxiety

Anxiety was identified as an important factor that could significantly affect the learning of foreign languages (Liu, 2012). Foreign language learning anxiety was described by Gardner and MacIntyre (1993) as fear that occurs when a learner is expected to use the foreign language. The most remarkable theory of foreign language learning anxiety to date was developed by Horwitz, Horwitz, and Cope (1991), who defined three components of foreign language learning anxiety: communication apprehension, test anxiety, and fear of negative evaluation. Communication apprehension is related to authentic communication with others and results from the lack of ability to express fully and freely (Mejias, Applbaum, Applbaum, & Trotter, 1991). Test anxiety is caused by a fear of failure on academic performance (Sarason, 1986). In a foreign language class, English particularly, where quizzes and examinations occur frequently, learners reported high anxiety when they didn't do well on a test. The third foreign language learning anxiety is the apprehension of negative evaluation; this can extend to outside the classroom where learners are overly sensitive to the evaluations from others and further results in much higher anxiety while speaking English. Anxiety turned out to be the most powerful and negative predictor for the students' performance in English. Highly-anxious students tended to perform worse than lowly-anxious students. They were also not willing to speak and stay silent in the classes (Liu & Huang, 2011). Dobson (2012) explained that anxiety caused negative effects to student's learning. Anxiety impacts most language learners, causing them to have a feeling of uneasiness and discouragement towards English learning (Riffat, 2010; Yan & Horwitz, 2008). An extended influence may be less interest and low motivation towards learning. Interestingly, Roth (2008) found that it didn't seem to matter whether students had low or high achievement, all were anxious. The students with low achievement and lower

grades were anxious they might fail. As for the students with high achievement, they were still anxious because they were overly concerned with not doing well or being perfect. Anxiety has been correlated to confidence, self-esteem, attitude, and motivation (Li & Pan, 2009). Learning anxiety may be caused by a failure in the past, lack of preparation, lack of confident in one's ability and individual psychological factors (Gardner & MacIntyre, 1992). By looking far into the past to nowadays, flipped education may provide a way out, at least, another option for English teachers by reconsidering how to lower students' anxiety by flipping the students' thinking about grades, achievement, and learning outcome assessment. It seems when using flipped classroom methods, students' learning attitude and interests are much better than when learning in traditional classrooms (Bergmann & Sams, 2012). A teacher's role will be different in flipped classrooms; he/she plays a role more like a "coach" or a "consultant" that helps students learn more effectively than in a traditional classroom (Lei, 2013). As Wu (2016) explained, a teachers' role used to be knowledge givers whereas in a flipped classroom they become capability builders. There is a possibility when the teacher's role changes, student anxiety may be reduced. Just picture when a teacher becomes an encourager, a helper, a guide, a coach, and a more relaxing learning environment as well as more effective learning outcome can be achieved. Nevertheless, even if the flipped classroom approach has numerous positive effects, little research has been done that directly addresses students' English learning anxiety when the flipped classroom approach is applied in English classes.

Based on the review of literature, this paper intends to find out the relationship between flipped classroom and students' anxiety in learning English. Two hypotheses and two research questions are posted.

- H1: Students' anxiety will decrease when learning English and will be positively correlated if teachers apply some flipped classroom teaching approaches.
- H2: Students' will not actively interact with teachers in English classes when they have anxiety.
- RQ 1: What causes an increase in students' anxiety when learning English?
- RQ 2: Which particular flipped teaching approaches may decrease students' anxiety?

III. Methodology

1. Participants

Participants in this study were 380 college students, comprised of 79 males and 301 females. They came from seven departments in a central university in Taiwan, mainly from College of Languages-English major students mainly- 218 (57%), followed by College of Business, 90 (24%), College of Information, 30 (8%), College of Design, 25 (7%), and College of Health, 17 (4%). Included were freshmen (21%), sophomore (16%), juniors (48%), and seniors (15%). Participants in this study were all from one single university where an e-learning platform was sufficiently provided and used extensively. Participants have been exposed to different degrees of flipped learning ways depending on how widely their teachers utilized that

e-device to teach English. Verbal and written information about the purpose of the study as well as the flipped classroom description was given prior to the completion of the questionnaire. Students fully understood their participation would be anonymous and confidential. It took approximately 15 minutes to complete the form. All participants voluntarily participated in this study without being granted any extra credit.

2. Procedure

This study first began in 2015. After reviewing related literature review and joining some workshops, the researcher led a group of senior students to develop the questionnaire based on the interest of exploring college students' perspective towards flipped education as well as their English learning anxiety. A pilot study was conducted and the questionnaire modified as needed. The reliability of the questionnaire was not as good as expected (α = .566). A year later, more participants were recruited, and then the Cronbach's alpha value was increased to a level which was acceptable. An online survey link was provided; meanwhile, a paper-and-pencil survey sheet was printed out and distributed to some participants who were not available to access the internet during the time of data collection. Participants were aware of the purpose of this study and they were given freedom to decide if they wanted to participate in answering the questionnaire or not. Anonymity and confidentiality were fully preserved.

3. Instrument

The questionnaire was a 7-point Likert scale, apart from asking participants' general information, such as their gender, department, and year. Via reading a great amount of literature review concerning the flipped learning way and anxiety issue, 15 questions were developed to examine students' perspective about particular flipped teaching approaches (Q 1, 2,4,8,9,10,11), students' interaction tendency and learning preferences (Q 2,5,6,7), and causes for increasing their anxiety in English classes (Q 3,12,13,14,15). The Cronbach's α coefficient value was .746. A bilingual questionnaire is provided in Appendix.

4. Data Analysis

Data analysis provided explanations of the statistical strategy for the research questions formulated in this study. Data analysis was conducted descriptively to determine the answers to the research hypotheses and one research question. The IBM SPSS Statistics 24 for Windows was used to organize, compute, and analyze the data. All statistical tests are conducted at a .01 level of significance. Demographic information was first analyzed by frequencies and percentages. Then, descriptive statistics were conducted in terms of answering the research questions. Also, Pearson correlation and multiple regression were computed to answer further questions.

IV. Findings

In order to test the first hypothesis, "Students' anxiety will decrease when learning English and will be positively correlated if teachers apply some flipped classroom teaching approaches," Pearson correlation was computed. It revealed the relationship between flipped classroom teaching approaches (Q 1,2,4,8,9,10,11) were positively associated with decreasing students' anxiety (Q 3,12,13,14,15) when learning English, r=.719, p<.01. This outcome meant that 52% of the variance of students' anxiety was linked to teachers who utilized more flipped classroom teaching approaches, students' learning anxiety was likely decreased. Therefore, the hypothesis was supported.

To test the second hypothesis, "Students' will not actively interact with teachers in English classes when they have anxiety," another Pearson correlation was conducted. Again, students' learning anxiety (Q 3,12,13,14,15) and students' interaction tendency and learning preferences were grouped (Q 2,5,6,7) showing that students tend to reluctantly interact actively with teachers when they feel anxiety, r = -.371, p < .01. The result indicated that when students had a feeling of stronger anxiety, they were less willing to interact with teachers in English classes. Hence, the second hypothesis was also supported. Table 1 provides the details.

Table 1. Correlations among Students' Learning Anxiety, Flipped Classroom, and Classroom Interaction

	Anxiety	Flipped	Interaction
Anxiety	1	.719**	371**
Flipped	.719**	* 1	
Interaction	371**	:	1

Notes: ** p < .01 (two-tailed)

To answer the research question one posted in this study, "What causes an increase in students' anxiety when learning English?" multiple regression was computed to explore the relative causes of students' learning anxiety. The dependent variable was students' anxiety, and the independent variable were teachers' teaching ways, more likely, the so-called a traditional approach, such as one-way lecture, teacher gives instruction alone, lecture in class, do homework at home, assess students' performance by giving number grade, ask students to answer questions, request students to converse in English and/or express opinions in English and neglect students' comprehension level (Q 5,6,7,12,13,14,15). The stepwise regression model showed that the most significant cause was "getting low grades," and accounted for 70% of variance (adjusted $R^2 = .70$; p < .001). Students' English leaning anxiety increased when teacher "asking students to answer questions" (adjusted $R^2 = .89$; p < .001). Students' learning anxiety increased more when students have to "communicate in English" (adjusted $R^2 = .93$; p < .001) and anxiety level was shown higher when students were asked for "giving opinions"

(adjusted R^2 = .97; p<.001). "Can't understand English while learning in English classes," students' anxiety was escalated to the maximum limit (adjusted R^2 =1.00; p<.001). Table 2 displays the details.

Table 2. Regression Model about Causes that Increase Students' English Learning Anxiety

Dependent variable=Students' Learning Anxiety							
Causes of Anxiety	Model 1	Model 2	Model 3	Model 4	Model 5		
Getting low grades	.836***	.585***	.445***	.437***	.276***		
Answer questions		.502***	.404***	.289***	.239***		
Communicating in English			.301***	.296***	.260***		
Giving Opinions				.225***	.232***		
Deficiency in English ability	y				.274***		
R	.836	.942	.967	.985	1.000		
F ratio	874.27	1480.20	1803.04	3084.10	1.000		
\mathbb{R}^2	.698	.887	.935	.970	1.000		
Adj. R ²	.697	.886	.934	.970	1.000		

Notes: *** *p*<.001

To answer research question two, "Which particular flipped teaching approaches may decrease students' anxiety?", descriptive statistic was performed to find out which flipped teaching approaches students were in favor of and how each might help them lower anxiety while learning English. Four teaching approaches were found to be favorable to decrease students' learning anxiety from students' perspective in this present study. More than 50% chose "agree to strongly agree" as the indicator and gave a further explanation. Watching movies and videos was chosen most often (91%), followed by taking English classes outside the regular classroom (71%), engaging in group activities (68%), and interacting with students (65%). Question 6 and 11 reached over 50% but these two particular teaching-and-learning ways were not categorized as flipped teaching approaches. Further in-depth discussion will be stated in the section of Discussion. Question 3, 12, 13, 14, and 15 measured students' anxiety in English classes, therefore won't be listed in the following Table. Table 3 provides details.

Table 3. The Descriptive Analysis of Participant Agreement Concerning Flipped Teaching
Approaches

Item statement	M±SD	Above	Frequency (%)							
		50% 1 strongly disagn				ree7 strongly agree				
			1	2	3	4	5	6	7	
Q1-Learning outside	5.20±1.60	v	4.2	3.7	5.0	16.6	20.5	25.8	24.2	
Q2-Learning autonomy	3.75 ± 1.83		14.7	14.5	16.8	16.3	16.8	14.5	6.3	
Q4-Group activities	5.00±1.61	v	3.9	5.3	8.4	14.7	22.6	27.1	17.9	
Q5-One-way teaching	3.80±1.69		12.4	10.8	16.8	27.9	14.7	11.1	6.3	
Q6-Receive teacher instruction	5.06±1.39	0	2.1	2.6	7.9	17.9	28.2	26.6	14.7	
Q7-Like traditional way of learning	3.63±1.66		12.1	12.4	25.0	22.6	12.9	8.4	6.6	
Q8-Teacher interact with me	5.00±1.43	v	2.6	1.6	9.5	21.3	25.5	23.2	16.3	
Q9-Learning from movies and videos	5.97±1.23	v	1.6	1.1	1.8	5.0	15.3	35.5	39.7	
Q10-Preview the lesson	4.23±1.69		7.1	10.0	15.8	22.1	20.3	14.7	10.0	
Q11-Different teaching won't help	2.70±1.38	0	21.1	27.4	28.7	13.7	4.5	2.6	2.1	

Notes: 1=strongly disagree; 2=mostly disagree; 3=disagree; 4=undecided; 5=agree; 6=mostly agree; 7=strongly agree

V. Discussions

This study aimed to explore how college students' English learning anxiety could be affected if teachers were to apply some flipped classroom teaching approaches, as well as what the causes are that trigger students' learning anxiety in English classes. The significance of using some flipped classroom teaching approaches did show positive relationship to reducing students' English learning anxiety (r=.719; p<.01). Use of four teaching methods was recommended for decreasing students' learning anxiety. First, 70.5% students "agree to strongly agree" when they "have English classes outside the regular classroom", it could reduce their learning anxiety. Second, "group activities" also produced a positive effect with 67.6% of students indicating this learning way made them less anxious and increased their participation willingness. Meanwhile, 65% of students stated that they would be more comfortable when "English teacher interacted with me in class." Lastly, 90.5% of students pointed out they felt relaxed to learn English by "watching movies and videos." The descriptive statistics again strengthen the result of the first hypothesis. Students do feel less anxious when teachers use flipped teaching approaches. The result confirmed another study's findings, that is, in a flipped classroom students feel more interested to learn as well as enjoy more interaction with teachers (曾釋嫻, 2015). The second hypothesis in this study supported and indicated a similar result, when students feel anxious, they were less willing to interact with teachers (r = -.371, p < .01) which agreed with the earlier conclusion. Anxiety is an important factor to hamper their participation.

While taking a closer look at the frequency report from analyzing the data, some interesting phenomena was revealed. 77.2% of students stated they "disagree to strongly disagree" that different teaching approaches wouldn't help them, and 40% disagree they like English teachers to give lectures in a one-way approach whereas 32% would rather have a oneway teaching approach. These findings explained that students would rather have a change compared to a traditional way of learning. However, when they were asked if they would preview the lesson by watching videos at home, 45% of them expressed lack of interest and annoyance, only 33% will willingly do so. Surprisingly, 69.5% of students indicated that they "agree to strongly agree" to receiving teacher's instruction directly. Though the result seems to be puzzling, it actually truthfully reflects our English classroom teaching-learning scenario at present. Even though the data has confirmed flipped learning causes less anxiety, students' reaction to previewing lessons at home showed a higher percentage of indicating annoyance and tiredness than those who were willing (45% vs. 33%); moreover, results showed that students actually enjoy teachers employing more teaching methods and flipped teaching approaches (77%), whereas nearly 70% of students prefer sitting and receiving teacher's instruction alone. It can't be overstated that nowadays our college students tend to be lethargic and reluctant to commit to their own learning outcome.

This study results also revealed some insightful information about causes of increasing students' anxiety. These causes definitely give English teachers a great reminder. When the institutional goal is focused on improving students' learning outcome, such as getting higher English proficiency test scores, maybe these causes could serve as a call for necessary adjustment of teaching approaches. "Get a poor grade" was found to be the most significant cause to increase students' anxiety, and gradually made them avoid learning English, followed by "being asked to answer questions, communicating, giving opinion in English, and can't understand English." When added together, students' anxiety reached the maximum. These statements were not surprising to the author. The findings are also consistent with the previous studies that relate to English learning anxiety and learners' confidence (Gardner & MacIntyre, 1992; Li & Pan, 2009). In a traditional classroom where teacher-centeredness and testorientation are the mainstream, surely students' learning anxiety is not a key factor that draws teachers' attention, and it is fair to conclude, students' learning anxiety has been neglected. Encouragingly, flipped classroom has proved to enhance students' learning confidence, and learning effectiveness (Tsai & Lin, 2014) due to students' learning being more individualized, or personalized, moreover, learning can take place at their own pace with good preparation before coming to the classroom. Therefore, anxiety of learning or speaking English can be reduced. However, from the results of this study, the flipped classroom approach may not be the *only* solution. The answer is clear; even though students indicated they will be less anxious if watching learning videos and movies at home, a high percentage of students will not be willing to do so. In addition, to change their learning preferences may take a little longer time,

a very high percentage of students indicated "they are used to receiving English teacher's instruction." This is more likely a catch-22 situation; flipped education must be adapted to make an effective learning happen both from teacher and student, their willingness to make a change of teaching and learning. The author believes without a flipped teacher, willingly to change what has been done in the past, flipped classroom will only be a fancy catchphrase. Meanwhile, students need to be educated and provided different learning approaches; gradually, they will begin to taste a more dynamic, interesting, and effective way to learn English.

1. Limitations of this study

Though the finding of this study has come to some significant conclusions, there are some unavoidable limitations that need to be addressed. First, participants were mainly from one single university, therefore having some shared similar characteristics and so did their English teachers. Therefore, we need to be aware that potential bias in the result could occur. Undoubtedly, the result can only be generalized to this particular pollution. Second, the questionnaire was developed with much care, the reliability alpha value was fair, but the validity of this study was not well thought through. This could also skew the result of the study. Then, female participants were the majority. If a gender issue can bring differences, the results of this study could have been affected. Finally, this study was conducted by a survey. How seriously participants responded to each question could be suspect. Their perspective and attitude when giving answers were hard to control. If indeed some were casually giving their responses, this could potentially increase the bias of this study.

2. Suggestions for future studies

Future studies might consider how much an English teacher at college level is willing to flip their English classes. A reason for this is due to college level teachers' pressure for publication and promotion. Flipped classroom definitely requires much more time than simply giving lectures. Utilizing flipped teaching approaches must first come from a teacher who is willing to use it while teaching. Another focus for a future study will be how college students can change their learning habit from receiving teacher's instruction to self-learning; that will be considered an autonomous learning from the students' perspective. Also, a consideration would be to add more flipped teaching approaches to a future questionnaire, thereby producing more convincing results. Finally, English educators should reconsider the assessment methods. Is giving a test the only way to measure their learning outcome? If getting poor test scores can bring such high anxiety, this must be thought through in the teaching-and-learning process.

Appendix A

1. Having English classes outside the regular classroom will reduce my anxiety. 把英文課學習帶出教室上課,會降低我的焦慮 。

2. Learning autonomy doesn't help me learn English 我自動學習英文對我的學習沒有幫助。

3. Giving opinions in English classes make me nervous. 在英文課堂中要我發表意見讓我感到緊張。

4. Group activities make me learn more and be more willing to participate. 分組合作學習方式使我更有學習及參與意願。

5. I like English teachers giving lectures using a one-way teaching approach. For example, the teacher lectures and students do not need to respond 我喜歡英文老師單向式的授課方式。例如:老師講課學生不需給予回應。

- 6. I am used to receiving English teacher's instruction in my process of learning. 在學習過程中,我習慣接受英文老師的指導。
- 7. I like teachers using the traditional mode of teaching, "English teacher lectures in class and students do homework at home."

我喜歡傳統上課模式"英文課老師講課,回家做作業"。

8. I feel more comfortable when English teachers interact with me in class. 英文老師在課堂中跟我互動,我覺得上課比較自在。

9. I feel relaxed to learn English by watching movies and videos. 利用看英文影片、電影等學習方式讓我感到輕鬆。

10. I feel tired and annoyed when previewing lessons by watching videos at home. 在家用影片預習下一堂上課內容讓我覺得好煩好累。

11. It doesn't help my learning even when teachers use different teaching approaches. 不同的教學方法,對我的學習沒有產生幫助。

12. I feel anxious to communicate in English.

要我用英語交談讓我感到焦慮。

13. I avoid learning English and feel anxious when I get a poor grade. 英語成績不好使我逃避學習英文並且上課感到焦慮。

14. I feel depressed and anxious when I can't understand English. 聽不懂英文讓我感到沮喪焦慮沒有自信心。

15. My anxiety immediately increases when I am called on to answer questions by the teacher in English classes.

當我在英文課堂中被老師叫到回答問題,焦慮感立刻升高。

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