

Flipping a Chinese University EFL Course: What Students and Teachers Think of the Model

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“Flipping” the classroom is an instructional strategy in which students do homework in class and classwork at home, with the ultimate goal of spending more in-class time on problem-solving and individualized instruction (Lage, Platt, & Treglia, 2000). Although this strategy has been embraced by K-12 teachers in the United States, research into applying the “flipped” model in an English as a foreign language (EFL) context at the university level has yet to be published. To address this issue, an experiment was conducted with intermediate level EFL classes at a university in Macau, China. Data from observations and surveys revealed that initially the flipped model did not match learner expectations of teacher roles in the classroom. However, at the end of the 15-week course, students in the experimental classes requested additional flipped materials and appeared more comfortable with the model. Additional findings from teaching journals uncovered that three out of the four teachers recommend the flipped approach for promoting creativity and opportunities for higher order learning in the classroom. The journals also indicated some skepticism among teachers in regards to applying the flipped concept to language instruction and struggles with student engagement with the materials.

Keywords: flipped classroom, technology-enhanced language learning, instructional strategies

Introduction

Today, any conversation about new teaching methodologies would include some mention of “flipping the classroom.” Flipping the classroom is a pedagogical model which involves inverting the way that instruction is presented and homework is accomplished. In the traditional classroom, teachers lecture during class time, and students engage in writing, reading, and problem-solving tasks outside the classroom (Lage, Platt, & Treglia, 2000). However, in the flipped classroom, students can access lectures at home via pre-recorded videos that the teacher has prepared, and then use class time to answer questions, do group work, discuss issues and concepts, and solve problems. In essence, students undertake homework in class and do classwork at home in the flipped model, creating an “inverse” or “upside-down classroom” (Baker, 2000).

Flipping the classroom involves much more than adding technology and out-of-class video activities to your lessons; it requires both teachers and students to “flip” the way they fundamentally view education. Trends in teaching English as a second language (TESL) have continually been moving towards improving students’ oral and written language abilities – shifting away from translation and moving towards delivering vast amounts of “comprehensible input” (Gregg, 1986), to finally making language classrooms more communicative with Communicative Language Teaching (CLT). Computer-assisted Language Learning (CALL) and Technology-enhanced Language Learning (TELL) are 21st century educational techniques used to improve language learning, involving students in authentic tasks that they use in their daily lives. Teachers have to thus equip themselves with various computer skills in order to stay updated in the field of English language teaching (ELT) and to meet the needs of today’s generation of learners.

The flipped model of learning takes CALL and TELL one step further – shifting the physical location of the classroom to anywhere an Internet or Wi-Fi connection exists, be it a café, a library, a bus, or even a beach. The flipped

model thus alters the concept of the walled classroom and creates a boundless classroom – an idea which is in line with 21st century learning (ATC21S, 2012) and which mixes constructivist theories of second language acquisition (SLA) with behaviorist principles of teaching and learning.

In this study, four teachers at an English-medium university in Macau, China, wanted to investigate the applications of the flipped model with first-year English as a foreign language (EFL) learners in their classrooms. Because the researchers had encountered very little writing about the approach being used outside the United States or in tertiary environments, this study sought to add to this area in the literature. Building on the limited research that was found, the current study also hoped to address the gap in controlled experimental (or quasi-experimental) studies employing a flipped strategy. By fully flipping, partially flipping, and not flipping six of their sections of a high-intermediate integrated-skills English class, the researchers sought to answer the following research questions:

RQ1: How does flipping the classroom change the ways in which students view learning?

RQ2: What are teachers' perceptions and experiences with flipping the classroom before, during, and after a flipped course?

Literature Review

A survey of the research on flipping at the university level revealed three common areas of publication in the field. The most common types of studies conducted on the flipped classroom explore student perceptions of the model and involve the use of surveys or interviews to inquire into student satisfaction with the model. A second trend in the research is an examination of teaching techniques that can be used to incorporate the flipped model into the classroom. Finally, a third trend includes descriptive articles that exhibit the step-by-step design and theoretical underpinnings of the flipped

classroom. To date, there has been little experimental or quasi-experimental data reported on the flipped classroom – an area which the current investigation addresses.

Studies on student perceptions about the flipped model have been overwhelmingly positive. Papadopoulos, Santiago-Roman, and Portela (2010) administered a 42-question survey in their engineering statistics classes and concluded that students found the inverted method to be worthwhile, that the lessons were useful and interactive, and that the inverted method was preferable to the traditional lecture-based class. These findings are comparable to those concluded by Pedroni and Meyer (2006), who collected data from their computer science classes which were taught with an inverted framework. Pedroni and Meyer found that students' grade averages slightly increased from 4.0 to 4.1 and that satisfaction with the software used to run the online portion of the class (Traffic and Flag Hunt) increased from 2.7 to 2.9 based on a 1-5 Likert Scale. Finally, Zappe, Leicht, Messner, Litzinger, and Lee (2009) found that, when flipping their engineering classes, students preferred only about half of the classes be flipped so as to allow a reasonable amount of time for traditional lectures as well. By using video lectures on iTunesU, Zappe et al. found that the online component allowed for increased teacher-student interaction and that students were willing to use out-of-class time to watch the videotaped lessons, with many of them watching portions of the videos multiple times in order to gain a better understanding of the concepts. A majority of their students (74%) felt that the flipped classrooms were helpful, and 75.3% agreed that the additional time spent in class working on problem-solving activities greatly enhanced their understanding of the concepts. Despite this, most students said that the fully flipped class was not preferable over a partially flipped class.

An abundance of articles and websites can now easily be found which present teaching techniques that can be used to create a flipped classroom. For example, Gannod, Burge and Helmick (2007) present the flipped model in the context of a software engineering curriculum. For their study, they incorporated podcasting for out-of-class activities and cooperative learning

for in-class activities, and demonstrate how the traditional classroom is drastically different from the inverted (or flipped) classroom. They highlight the benefits of flipping for both students and instructors, as well as answer general FAQs for teachers who might be interested in trying this method of instruction. A second example can be seen in Kellogg (2009), who developed online materials filled with open-ended problem-solving experiences for an industrial engineering course. By presenting materials with embedded interactions (the technological and conceptual phenomena of seamlessly integrating the means for interaction into everyday artifacts), Kellogg found that the inverted classroom helped to supplement and reinforce classroom concepts.

There are also many articles and websites which convey how to create a flipped classroom step by step. Muldrow (2013), for example, provides a guide on flipping and demonstrates that any teacher can set up a flipped environment easily. By displaying how flipping works and how to get students involved in the flipped classroom, Muldrow's article is one of many that help teachers to incorporate the approach. Bergmann and Sams (2012) explicitly depict how to set up a flipped classroom in order to provide individualized instruction to every student in the class. Day and Foley (2006) present how web-based intervention plans help to improve student learning outcomes, providing a framework for other computer science teachers to follow. These articles are just a few that are also included in the myriad of blog posts and news articles showing how to set up a flipped classroom.

As detailed above, research on the flipped model at the tertiary level is filled with reports on how to flip, technology that can be used for flipping, and testimonials of student satisfaction with the flipped model. However, few, if any, offer experimental data on the flipped approach in a controlled environment. Therefore, research along these lines is of the utmost importance. The present study seeks to add experimental data to the limited amount of research currently available on flipping, while also exploring the viability of flipping at the tertiary level with non-native English speaking students.

Methodology

Participants and Context

This investigation is a case study set in the context of Macau, China. English language classes at the university where the research was undertaken are held in the English Language Centre (ELC) – a department within the Faculty of Arts and Humanities. All incoming students are required to take a year-long English language course at the intermediate level as part of their requirements for General Education (GE). Most students complete this requirement in the first year of their studies, although some students must complete two years of study if their proficiency is below the intermediate level upon entering the university. It is also possible for students to defer this course until their second year, and some students continue to take more advanced courses after completing their required English course (depending on their majors, among other factors).

The participants in this study were high-intermediate EFL learners enrolled in the same level of GE English courses at the ELC. The researchers for this study and one additional teacher taught six sections of the high-intermediate group for this experiment. One hundred and thirty-five students (of a total of 136 students enrolled) participated in this experiment. Although three classes were part of the experimental group, and three classes formed the control group at the beginning of the experiment, this changed due to complications that arose in response to students' needs. In the end, four classes became part of the experimental group (referred to as “flipped,” “front-flipped,” or “back-flipped”), and two classes formed the control group (referred to as “non-flipped”).

The reason for the change in the composition of the groups was that one of the teachers ended up only flipping her class for the first half of the semester in response to student observations and displays of dissatisfaction with the flipped model, resulting in one section being “front-flipped.” The same also occurred with one of the other groups: The teacher taught traditionally (i.e.,

without incorporating flipped techniques) during the first half of the semester, but then flipped the class for the second half, which is referred to here as the “back-flipped” class. This phenomenon is not unique, as data from “partially flipped classes” and “fully flipped classes” from Bishop and Verleger (2013) reveal a similar situation.

As for the composition of the participating classes, a little over half of the students (54%) came from Mainland China, while 40% were Macao locals. In terms of their first language (L1), 45% spoke Cantonese as an L1 while 55% spoke Mandarin. The average age of the participants was 18.5 years, and most were first-year university students (see Figure 1 for a more detailed view of the regional background of the students).

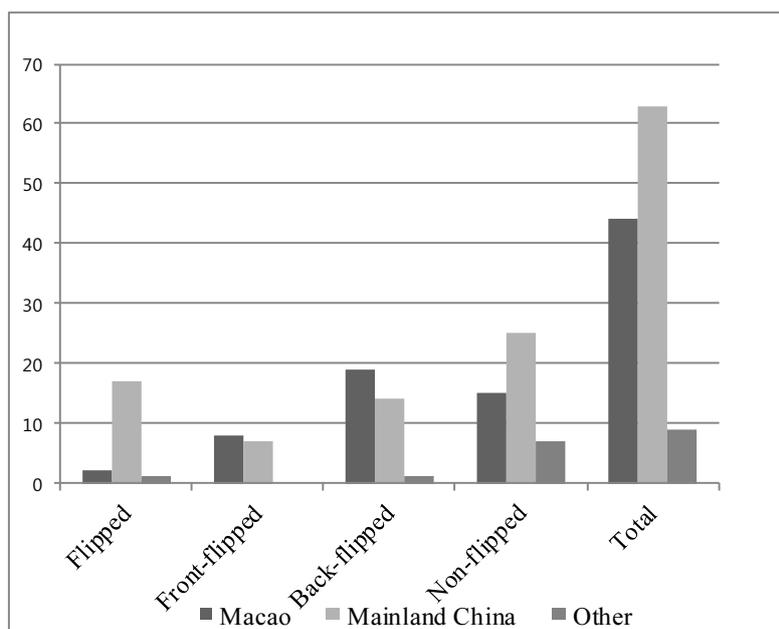


Figure 1. Student demographics by region

Instructional Design

The duration of each class meeting was 75 minutes, with classes meeting twice per week, for a total of 30 class sessions. The four teachers involved in this study met regularly to discuss the instructional design of the flipped and the non-flipped classes. As the goal of flipping was to better meet the needs of the students, it was decided that not every lesson, nor every module, would be flipped. In the end, three modules that were deemed most conducive to flipping were selected: 1) annotation, summary, and response; 2) individual presentations on a visual; and 3) public service announcement and group presentation. Within each module, flipped lessons pertained to themes such as how to engage in peer assessment, how to identify logical fallacies, and how to distinguish between the use of ethos, pathos and logos in written advertisements, commercials, and academic texts. (See Appendix A for a sample lesson plan that was used in the flipped classrooms.)

While students in the control classes received information in class regarding the requirements for upcoming assignments, such as rubrics and assessment criteria, students in the flipped classes watched videos or screencasts of 10-15 minutes in duration containing the same information. The online lectures were frequently supplemented with TED Talks, YouTube videos, or other online information. Online instruction ranged from 15-30 minutes per session, with other homework such as responding to the videos taking approximately 20-30 minutes per task.

After watching the videos, students were also given different opportunities to show that they understood the content of the video either by responding to the video with an oral or written comment, creating their own video response, participating in a Moodle forum discussion on the topic, or by answering questions on a handout or online quiz. For example, one online lecture was about the difference between facts and opinions, and students showed that they understood the lecture by responding with two oral examples of facts and opinions. In another example, students watched a screencast on how to annotate academic texts. One of the researchers used a speak-aloud method to

scaffold the annotation, demonstrating how a text should be annotated either electronically in a Microsoft Word document or with paper and pencil. As a follow-up activity to the screencast, students had to annotate their class syllabus in class. In the following class, students exchanged their annotations and provided feedback according to a guideline sheet created by the teacher.

Students were thus expected to preview course materials prior to class through videos made by the researchers on VoiceThread or through screencasts. Many handouts and reading materials were also assigned to be completed at home, so that class time could be spent synthesizing and evaluating the materials for the lesson. Because students had spent time at home watching videotaped assignment and/or lecture materials, they were given greater opportunities in class to engage with the materials through a variety of student-centered activities, such as running dictations, jigsaw readings, group discussions, debates, drawing concepts, evaluating visuals, peer review, presentations, role-plays, and other types of group or pair tasks. (See Appendix B for an example of a running dictation that was used to introduce summary writing.) In another example, when asked to apply their knowledge about the differences between fact and opinion, students had to move around the classroom, reading one of 12 strips of paper posted on the walls which had either one fact or one opinion written on it. With partners, they had to decide if the statement on each posting was fact or opinion and write the reason on a post-it note. Students were then given topics where they had to create one fact and one opinion for each theme.

A significant part of class time was also dedicated to using different technologies for educational purposes. For example, groups worked collaboratively on Google Docs to write a persuasive essay, and they created storyboards for their group public service announcements on interactive sites such as goanimate.com or storyboardthat.com. They also worked individually and in pairs on language learning sites on the ELC Independent Learning Moodle webpage and used their smartphones to download QR question codes for review activities or to get information about visuals. In addition, in preparation for making their own videos, students were taught how to use

Microsoft Movie Maker, Camtasia Studio and other video editing software. Such exposure to technology thus helped address students' needs for digital literacy in today's modern era.

Data Collection

There were two instruments used to collect data for this study. First, students were given a questionnaire (using the platform Survey Monkey) regarding their classroom experiences either with or without a flipped approach (see also Doman & Webb, 2014). The first questionnaire was completed by a total of 44 flipped students and 91 non-flipped students (135 total). Some of the non-flipped students ended up being partially flipped, which Doman and Webb (2014) referred to as either the "back-flipped" or "front-flipped" groups. The second questionnaire was a follow-up to the first survey and was administered at the end of the semester. The second questionnaire mirrored the first questionnaire with the exception of demographic questions and an additional question on what kinds of technologies students use in their daily lives. A total of 105 (71 flipped students and 34 non-flipped students) responded to the second questionnaire. Data from the two questionnaires were compared in percentages and are discussed in the results section of this paper.

The second set of data comes from teacher reflections (journal entries) that were kept for the duration of the experiment. All four teachers recorded anecdotes about the successes and challenges that they experienced in their classrooms and representative excerpts from their journal entries are reported and analyzed.

Results

Student Findings

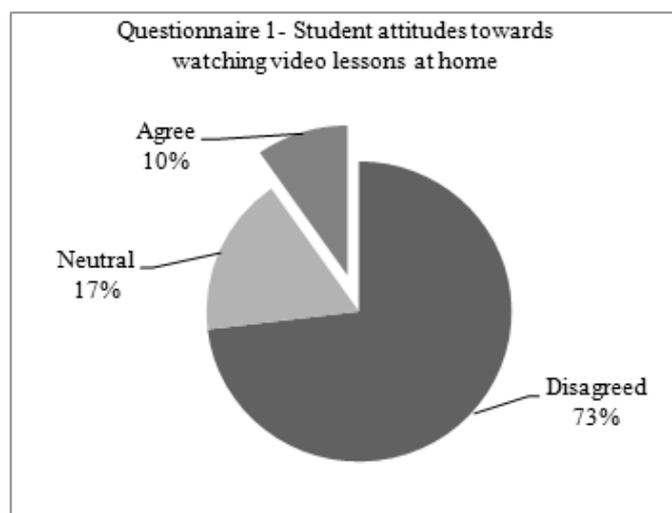
Initially, findings from the students did not support the flipped classroom model. In addressing the first research question, survey data indicated that students from the flipped and non-flipped classrooms both preferred traditional (i.e., teacher-fronted) instruction. When students were asked whether they preferred their teacher's instruction in class or the online videos and activities provided, 88.7% of the students in the flipped classes and 82.5% of the students in the non-flipped classes selected in-class teacher instruction. Such overwhelming support is consistent with findings from other studies investigating students' preferences for teacher-fronted instruction vs. student centered classrooms (e.g., Garrett & Shortall, 2002), as well as studies that have otherwise problematized communicative methods in the EFL context (e.g., Ellis, 1996; Li, 1998; McDonough, 2004; McDonough & Chaikitmongkol, 2007; Yu, 2001).

These findings are consistent with data from Question 1 in Questionnaire 1, where students reported that their classes were largely teacher-centered outside of the English Language Centre. Perhaps not surprisingly, 90.9% of the flipped students and 87.9% of the non-flipped students agreed or strongly agreed that their English classroom provides more opportunities than their other classes to communicate with other students. Li (2013) also found similar results among her Chinese students. Thus, students may have felt that teacher-fronted instruction was more conducive to learning as they had had more exposure to lecture-based instruction in the past (Doman, 2013).

Though students did not initially appear to support the flipped model, there was a gradual shift in attitudes among students in the experimental classes over time. In Questionnaire 1, which was administered during the first seven weeks of the class, 73.1% of the flipped and 58.3% of the non-flipped disagreed or strongly disagreed with liking to watch video lessons at home. However, after 14 weeks into the course (when Questionnaire 2 was

administered), only 15% of the flipped students now disagreed or strongly disagreed with this question. Furthermore, by the end of the class, 58.1% now supported the out-of-class online instruction. A total of 50% of the flipped students agreed or strongly agreed that they preferred watching video lessons at home. This change from the first questionnaire to the second questionnaire is presented below in Figure 2. Lage, Platt, and Treglia (2000) and Wang and Zhang (2013) found similar results among their students, noting the shift in students' mindset towards flipping over time.

As the non-flipped students were not receiving a heightened amount of out-of-class online materials like the flipped students were, their views remained relatively unchanged about the use of online instructional materials throughout the course of the study. 58.3% of the students strongly disagreed or disagreed with enjoying watching video lessons at home in Questionnaire 1, and 39.4% in Questionnaire 2. A large majority of the non-flipped students also reported feeling impartial, as 27.5% selected neutral on Questionnaire 1 and 45.5% on Questionnaire 2 on the same question.



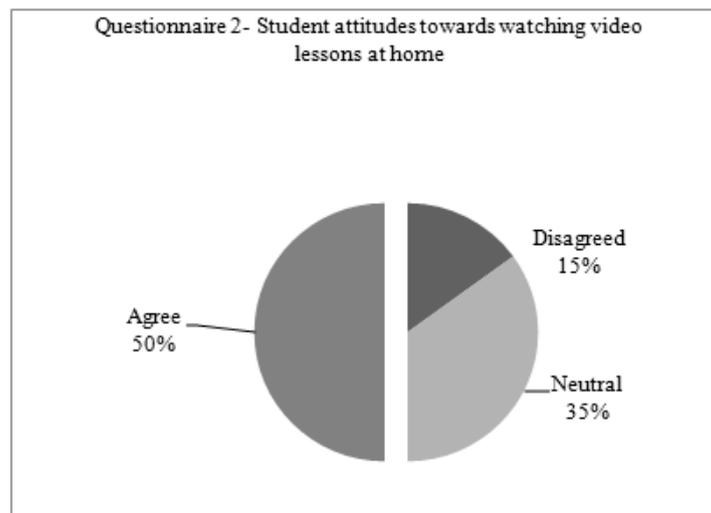


Figure 2. A comparison of the change in attitudes towards watching video lessons at home among flipped students in questionnaire 1 and questionnaire 2

Both the flipped and non-flipped classes had overall positive attitudes towards using online materials via the learning management system (LMS) Moodle. 68.2% of the flipped and 55.5% of the non-flipped students were positive (either strongly agreed or agreed) when asked about using Moodle to submit assignments and quizzes as well as in regards to receiving teacher feedback. Of this data, 20.5% of the flipped and 28.9% of the non-flipped students remained neutral and 11.4% of the flipped and 14.4% of the non-flipped disagreed. A small number of students strongly disagreed at 1.1%. Li (2013) also reported students having a positive attitude towards online materials in his study.

In Questionnaire 2, students were asked about the amount of online instruction provided in their classrooms. Though the flipped students were obviously receiving more online instruction than the non-flipped students, 73.7% of the students said that they wanted even more out-of-class online instruction. This contradicts students' views from questionnaire 1 that online

video instruction was less important than in-class teacher instruction and seems to indicate that over time, the flipped students wanted more online instruction and considered it useful. Butt (2014) found similar results where students in his flipped courses went through an adjustment period in their views towards teacher instruction and online video instruction.

Extensive details about the findings from the two questionnaires that were administered can be found in Doman and Webb (2014). Data that supports the student findings was recorded in the teacher reflections and observations, which are detailed below.

Teacher Findings

The four teachers that participated in this study engaged in a critical reflection of the flipped teaching experience during each stage of the research process. Teachers wrote down their perspectives on flipping before, during, and after the project in an effort to document potential changes in their own beliefs about the approach. Excerpts from the teachers' reflections are presented and further analyzed below.

TABLE 1

Teacher 1 (Flipped)

Perspectives on flipping before:

I assume that "flipping" will enhance the in-class experience in some way, making it more dynamic because there will be less teacher-fronted instruction and more student centered activity during the actual class period. I also believe that "flipping" will somehow reduce prep time for the teacher.

Perspectives on flipping during:

The videos, screencasts and other instructional support materials that will be used by students remotely (or online) must be well thought out, designed and prepared well in advance of the start of a semester. It is

also key that the instructor of a class is also the one primarily featured in the remote (or online) videos to reinforce the instructor's engagement and commitment to the class and its curriculum and materials.

There is palpable sense that much of the material presented to students remotely (or online) needed to be reviewed, reiterated or re-presented in-class. Students seemed to crave or need the direct, "live" teacher regardless of the quality or depth of the information presented to students from remote platforms.

Perspectives on flipping after:

In the field of language instruction, "flipping" is not as crucial a component as it is in other subject matters such as Chemistry, Statistics, Mathematics, Economics, etc. The nature of language instruction demands that in-class time is highly participatory and student-centered, so "flipping" techniques to increase in-class activities are, in a way, not relevant or necessary—even redundant.

In these excerpts from Teacher 1, we can see that initially, the instructor seems quite optimistic about flipping and has a positive orientation towards how flipping will affect the learning and teaching in her class. However, *during flipping*, the tone changes from one of optimism to one of caution, where the teacher reflects on how she has perceived students' reactions to the video materials and their apparent "craving" for "live" instruction. By the end of the semester, Teacher 1 seems to have completely shifted her views from those she initially held at the beginning of the semester, indicating that flipping may be "irrelevant" and "redundant" in the EFL context. Thus, overall, we get the sense that this teacher did not support the use of flipped materials in her class.

TABLE 2

Teacher 2 (Flipped)

Perspectives on flipping before:

Before the project I had heard of the popular buzzword in education referred to as “flipping.” I thought flipping would be a cool way to spice-up my classroom by having students communicate more outside of the classroom and refrain from monotonous homework. I knew flipping would require more work because I would have to take time to create more individualized out-of-class materials.

Perspectives on flipping during:

For me, it is hard to get the students interested in the online material. I could tell that the students weren't interested in the flipped model. However, after the 7th week I began to see a change in my students' attitudes. I started sharing their online materials in the class as points of discussion and students seemed to start seeing the connection between the out-of-class activities and in-class work. There was a lot of time on my part to create these connections and class materials.

Perspectives on flipping after:

After the project I can say that I truly believe flipping saves a drastic amount of class time; instead of passing out and detailing project guidelines for 10-15 minutes or administering a quiz for 30-45 minutes, the students got more time in class to learn and practice practical applications of the English language for their upcoming assignments. I can also say that the students get a lot more time practicing English outside of the classroom as they often re-recorded their speaking postings 3-5 times. But, a few students wrote on the teacher evaluation survey that there was a lot of homework. Flipping seemed to improve collaboration among the students. They worked collaboratively to finish writing assignments in-class on Google Docs as well as out of class. I can also say that flipping does

require more time on the part of the teacher and the students. However, flipping helped to inspire my own teaching and creativity. Instead of students asking me again and again in-class about where to find documents online they can simply replay my instructions at a moment's notice.

In the excerpts from Teacher 2, the teacher also expresses a generally positive outlook on the prospect of flipping initially, as did Teacher 1, although Teacher 2 anticipates an increased workload from the beginning, which Teacher 1 did not seem to expect. *During flipping*, Teacher 2 indicates some difficulty with engaging students in the online materials, but notes that this pattern began to change around the middle of the semester (Week 7). She also notes the effort needed to make connections between the flipped and in-class materials. Surprisingly, by the end of the class, Teacher 2 reports that flipping actually *saved time* in class and allowed for more time to be spent on interactive/collaborative activities. However, she does also mention that some students complained about the homework on the course evaluations, indicating that not all students found the materials to be particularly effective or enjoyable.

TABLE 3

Teacher 3 (non-flipped)

Perspectives on flipping before:

For me, a large part of language learning is human interaction – the actual co-presence of other people (not least importantly the teacher) using the second language to learn and interact. Coming from an interactionist cum sociocultural perspective of SLA, I wondered whether flipped teaching was really appropriate for a language class; after all, even during teacher-fronted segments of typical ESL/EFL classes (i.e., what would be considered “lecturing” in mainstream classes), these serve as a type of comprehensible input and therefore promote language learning (especially listening) in their own way.

Perspectives on flipping during:

I am wanting to utilize flipped materials in classes, but cannot in order to maintain the experimental design of the study. It's the end of the semester and I wish a lot of the assignments (descriptions, rubrics and grading criteria, examples of model work, etc.) could be explained online (i.e., "flipped") in order to save class time.

Perspectives on flipping after:

After collecting the data and discussing impressions and experiences at length with the other teachers, I think that my initial perspective has changed. I do feel that even in ESL/EFL classes, which are more or less inherently characterized by much of what characterizes flipped classrooms in mainstream education, there is a time and place for flipping which can definitely enhance things like engagement, access, and time management. Used purposefully and strategically, I think flipping portions of a class can be highly beneficial, and could even potentially lead to greater learning outcomes.

Teacher 3, whose class was not flipped, presents an interesting case. While he indicates some initial reservations about the flipped approach in terms of the goals of limiting teacher-fronted instruction (stating that such instruction can still be beneficial to language learners), his views seem to shift as a matter of practicality (i.e., to save time during the end of the semester). By the end of the semester, Teacher 3 explicitly states that his views have changed and notes that there is a "time and place" for flipping in ESL/EFL classes.

TABLE 4

Teacher 4 (Flipped)

Perspectives on flipping before:

I first heard the buzzword of "flipping" a lot prior to coming to Macau, especially in the K-12 system where my children went to

school in the United States. I did not immediately catch onto the craze because flipping seems much like what I was already doing in my university ESL classes, which was a lot of pair work and group work both inside and outside the classroom.

Perspectives on flipping during:

During this class I have to force myself to stay at least one step ahead of the students. I made a huge mistake by not preparing the video-taped segments prior the beginning of the semester, so I am busy making videos and audio files at the last minute. Also, it is discouraging to not see a change in students' attitudes.

It is now week 7 of the semester and a noticeable change is happening as students report more satisfaction with the videos in the student reflections.

Perspectives on flipping after:

I am so glad that I embarked on this experiment. Not only did flipping seem to make a difference to students, but it also changed the way that I incorporate technology into the classroom. Now, just introducing a topic and having students discuss it in pairs is no longer satisfactory to me. The incorporation of technology takes away from the routine aspects of just listening and discussing with a partner.

In this excerpt, Teacher 4 initially questions the applicability of flipping to ESL/EFL context, noting that her classes were already quite interactive and involved the types of student participation that characterize mainstream flipped classes (i.e., pair and group work). *During flipping*, she notes the increased workload involved in creating the flipped materials and also expresses some discouragement as a result of students' lack of engagement with the materials. However, this view seems to change around Week 7 (similar to Teacher 2), and by the end of the semester, she seems very optimistic about the entire experience, noting that it fundamentally changed

the way she incorporates technology into the classroom.

To summarize, three out of the four teachers seemed to support the flipped model of teaching in their classrooms while one focused on the drawbacks. Teacher 2 reported increased collaboration and increased language use among the students, as well as convenient access of instruction for learners who needed more time. Teacher 4 said that giving students access to materials and having them engage with the assignments outside of the classroom is better than just having students turn and talk to a partner as it reduces routine aspects of typical language courses and provides more creativity and excitement. Like Gannod, Burge and Helmick (2007), the researchers in the current study found that flipping was a viable option for both students and teachers and that both could reap the benefits of the teaching strategy.

Table 5 below summarizes the findings from the teacher data, categorizing their experiences into five themes based on repeating patterns found in each of the teacher's reflections.

TABLE 5
Common Themes among Teacher Attitudes towards Flipping

Common themes among teachers	# of occurrences of each theme	Examples
Initially skeptical about the flipped method (-)	3	Coming from an interactionist cum sociocultural perspective of SLA, I wondered whether flipped teaching was really appropriate for a language class. (T3)
Witnessed an increased amount of preparation (-)	3	I made a huge mistake by not preparing the video-taped segments prior the beginning of the semester, so I am busy making videos and audio files at the last minute. (T4)
Students were initially aversive to the flipped model (-)	3	For me, it is hard to get the students interested in the online material. However, after the 7th week I began to see a change in

Importance of flipping in saving class time (+)	2	my students' attitudes. (T2) Instead of passing out and detailing project guidelines for 10-15 minutes or administering a quiz for 30-45 minutes, the students got more time in class to learn and practice practical applications of the English language for their upcoming assignments. (T2)
Supported the flipped model in enhancing students learning at the end of the study (+)	3	There is a time and place for flipping which can definitely enhance things like engagement, access, and time management. (T3)

Discussion

This study set out to address two research questions: 1) how does flipping the classroom change the ways in which students view learning? and 2) what are teachers' perceptions and experiences with flipping the classroom before, during, and after a flipped course?

Data from student questionnaires both at the midterm and at the completion of the course along with teacher reflections reveal that students and teachers involved in the flipped model had similar experiences. Each research question is discussed below.

RQ1: How does flipping the classroom change the ways in which students view learning?

Even in today's technological society, many students continue to view traditional classroom learning as superior to online learning, and this was the case with the present study. Over time, however, students in the flipped classes in this study seemed to become more attuned to the flipped model. Naturally, the non-flipped students remained rather neutral in their views

about in-class vs. out-of-class instruction (via video materials), as they were not exposed to these materials. The flipped students also wanted more online instruction at the end of the semester. These findings are similar to those found in studies such as Li (2013) and Wang and Zhang (2013), in which the researchers' hypotheses of presenting students with a combination of the flipped model, CLT, and student-centered instruction seemed to be correct in that the flipped students became accustomed over time to the new methodology. The students in the flipped classes in this study were comfortable using online materials and reported enjoying the use of Moodle to submit and complete their assignments and quizzes. Similar to Kellogg (2009), students liked the online forum as a way to supplement classroom materials and to reinforce some of the concepts being taught, but they did not want the online portion of the class to be the only place where new material could be explored.

RQ2: What are teachers' perceptions and experiences with flipping the classroom before, during, and after a flipped course?

Teachers in the study seemed to vary in their opinions prior to introducing the flipped method. As noted above, Teacher 1 thought that flipping would reduce the amount of preparation time while Teacher 2 noted that it would require more time. All of the teachers agreed that flipping was a "buzzword" in education that they wanted to further explore in their classrooms, however, three out of four teachers started out very skeptical about the research. Teacher 1, Teacher 3, and Teacher 4 all noted that language instruction was already very communicative, and questioned how the flipped model could apply to their classes.

During the study, some of the teachers also had negative experiences that mirrored the students' challenges. Just as the students in the flipped classrooms had an adjustment period, teachers did as well. Teacher 4 used the word "discouraged" when not seeing any changes in the students'

performance or attitudes. Similarly, Teacher 2 directly noted that it was hard to get the students interested in the out-of-class materials. Teacher 1 also stated that these out-of-class materials needed to be explored again during class in some way; reinforcement was crucial to the students' understanding of the materials.

There seemed to be an adjustment period for the teachers with the amount of time it took to create flipped materials as well. As Teacher 2 expected, the amount of time seemed to grow as in-class connections to the materials needed to be carefully planned. Teacher 4 had a similar experience noting that she fell behind in the planning process and wished that the videos that were to be used in class had been carefully planned and crafted before the start of the semester.

Despite the many positive student and teacher findings that seem to support the flipped model, there are several drawbacks that are worth mentioning. There is a clear adjustment period that is noted among the students and teachers in the study, similar to what Inoue (2012) describes as the "process of internalization" (p. 135). At first, students feel that they have more homework outside of class because they are getting used to a new kind of learning environment (Wang & Zhang, 2013). This was exemplified, for example, when Teacher 2 noted that students complained about having too much work on the Teacher Evaluation Survey conducted by the University.

Time is another drawback noted by the flipped teachers, as they were getting used to a new teaching method that required more preparation. Creating videos and learning how to use new technology takes up more of teachers' time than traditional class preparation (Roehl, Reddy & Shannon, 2013), especially at first. For example, whereas teachers in non-flipped classes might have to simply edit one slide of a PPT because of a mistake, teachers in flipped classes may have to record an entirely different video if a mistake is made, which can not only be time-consuming, but also frustrating. Teachers' complaints about preparation time in the present study are consistent with findings from teachers in *The Flipped Classroom Field Guide* (n.d.). One of the reflections mentioned in the guide by Fisher, one of the

Guide's authors, is that the instructor has to do a lot more work in advance when flipping the classroom. "Don't fall into the trap of assuming technology will reduce the amount of time you invest in your course, at least initially" (p. 12). This is something that Teacher 1 struggled with, additionally noting that students wanted to see her face directly instead of substituting face-to-face interaction with videos made by people other than her. According to a national research survey of flipped classrooms, only 22% of students are watching videos that were created by their own teacher while 36% are watching videos created by teachers other than their own (Flipped Learning Network, 2013). This is something that future "flippers" and researchers may want to address in their classrooms. If flipping is to be successful, teachers may need to consider using screencasting videos that directly incorporate the teacher's face and/or voice.

Even though this preparation time was one of the major drawbacks for teachers, three out of the four teachers still concluded that the flipped method was a good way to enhance students' learning as long as it is conducted in a strategic manner. Teachers responded that they learned a lot about their teaching philosophies and class preparation skills and would most likely want to undertake flipping again in the next semester.

Among the three teachers that supported the flipped model at the end of the study, asynchronous learning seemed to emerge as a topic of critical attention and positive influence on learning for students in the flipped classes. Teachers in the study mentioned how students had easy access to materials online, re-recorded speaking activities via VoiceThread, and viewed PPTs, video lectures, and other materials multiple times. At the end of the study, students also noted that they wanted more out-of-class video instruction, implying that they either enjoyed the activities and/or found them useful. Teachers furthermore found that the asynchronous environment increased collaboration and attention to these materials via their LMS (Moodle). Similarly, Bakar, Latiff, and Hamat (2013) note the importance of asynchronous learning in giving a voice to lower level students, allowing them to build confidence by developing their speaking skills in an online

discussion forum. In this atmosphere, students are given more flexibility in communicating in social learning environments.

Flipped teachers in this study had a similar role in the classroom as noted in Deutsch's (2010) model (see Figure 3) of asynchronous learning enhancement, where technology becomes the connecting force in a top-down approach serving as a bridge for instruction of the content for students. While the role of asynchronous learning was not the central aim of the present study, this issue may be explored further in a future investigation of other data from the study.

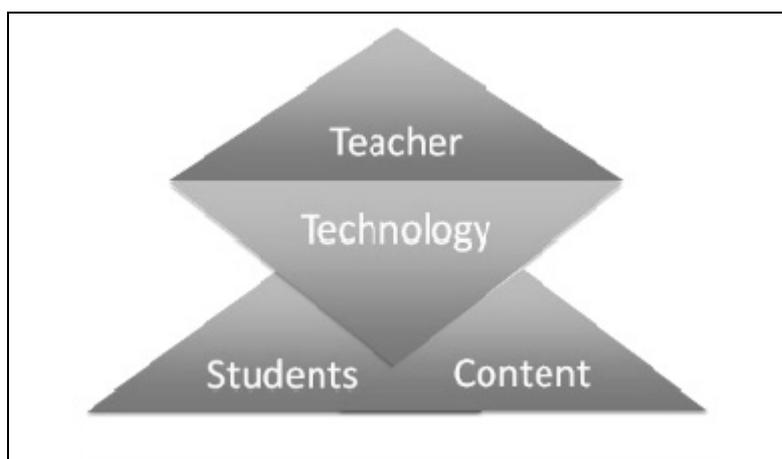


Figure 3. Asynchronous learning enhancement model (adapted from Deutsch, 2010)

As for the role of the teacher in the eyes of the students, there were conflicting results from the student survey data. Students still viewed the teacher as the person most responsible for their learning. These results are consistent with other studies which have looked into student perceptions of teacher-fronted vs. student-centered classes (e.g., Garrett & Shortall, 2002). Thus, the bridge between the teacher and technology in Figure 3 was not seen by most students. Results also suggested that there was a disconnect between

learner perceptions of the teacher's role and the kind of instruction that students wanted to receive in the classroom. If the flipped students in this study wanted more online video instruction, this would naturally entail less teacher instruction in the class and more communicative activities. Once again, this discrepancy seems to boil down to the adjustment period necessary for students' acceptance of the flipped model, which is critical for shifting their views about the teacher's role in the classroom to one of facilitator, rather than "transmitter of knowledge."

Similarly, studies that have investigated the adoption of CLT methods in EFL contexts have also suggested that an extended time period, in addition to the need to make CLT goals explicit to students, or "mediating" in Ellis' (1996) terms, is often necessary in order for students to adapt to such novel teaching practices (McDonough & Chaikitmongkol, 2007). When and how, exactly, this process of adjustment takes place is not fully understood, and as research in the field continues, future studies should investigate the process through which students come to view the teacher as a facilitator in the overall learning process.

The experiences of flipped teachers in the study were similar to those found in Deutsch (2010), who investigated teachers' experiences with implementing technology in blended learning courses. A total of four themes were found in Deutsch's study and among these themes, three were found to be similar among teachers in this study: frustration, facilitation of instruction and learning, and social connectedness. The exploration of the benefits and challenges for teachers who are using blended learning techniques such as the flipped model can be useful in providing future teacher support materials and in preparing professional development workshops (Deutsch, 2010). In this study, teachers noted that it took a lot of time to learn the technologies necessary to implement the flipped approach into the classroom. In particular, one teacher fell behind on creating the flipped lessons, which resulted in a change in the research design (described earlier in the paper as "front-flipped" and "back-flipped" courses). Additionally, one teacher struggled to engage students with the out-of-class materials, as they did not directly

feature the teacher's instruction via voice or face. This is an issue that future flipped teachers may seek to address as they implement the flipped model into their own classrooms.

Conclusion

Though the findings from students and teachers indicate positive attitudes towards flipping the EFL classroom, several drawbacks were also noted. In addition, the sample size of teachers ($n = 4$) in this study is much too small to make significant conclusions about teacher experiences with the flipped approach in the EFL classroom. A more in-depth qualitative analysis incorporating semi-structured interviews of teachers using the flipped approach in their EFL classes will provide more insight to teacher perceptions. The first and second surveys in the courses also do not serve as sufficient evidence to detail students' attitudes towards the flipped model in the Asian EFL context. Researchers in this study did, however, conduct open-ended interviews with students in both the control and experimental groups which will be further analyzed in a more detailed study as previously mentioned.

Future studies that explore the flipped model in EFL should make every effort to carefully create and pilot test survey instruments in order to ensure validity. The researchers of this study suggest carefully defining the constructs one wishes to measure, and putting these constructs into unambiguous operational terms in order to ensure internal validity (see also Schwarz & Oyserman, 2001). The survey results presented in this study were not coded or analyzed for such factors, which would have otherwise increased the reliability of the survey results.

Future studies should also include an analysis of the learning materials, such as the instructional videos and other pedagogical materials that were used in flipped classes. A recommendation of sites and materials most suitable for university-level learners should be compiled and validated with

data from students presenting their beliefs about the effectiveness of such materials.

The researchers of this study call on EFL teachers at the university level to undertake a flipped experiment and to add to the lack of data on flipping classes at this educational level. More collaborative projects should be undertaken not only within the same university program but also between universities in different contexts to compare and contrast the effects of flipping on different groups of learners.

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Appendix A

Sample Flipped Lesson Plan

DATE:	INSTRUCTORS:
<p>BRIEF DESCRIPTION: TO REVIEW ANNOTATION AND INTRODUCE SUMMARY</p> <p>PRIOR TO COMING TO CLASS, STUDENTS WILL HAVE LEARNED ABOUT ANNOTATION AND WATCHED A SCREENCAST ABOUT HOW TO ANNOTATE A TEXT. IN CLASS, THEY WILL BECOME EXPOSED TO SUMMARY AND RESPONSE WRITING AND THEN PRACTICE THOSE SKILLS IN CLASS AND FOR HOMEWORK.</p>	<p>Goals:</p> <ol style="list-style-type: none"> 1. To have students review the importance of peer review 2. To introduce the concept of summary and response and reinforce what a proper annotation should look like 3. To have students practice summarizing

TIME	PROCEDURES FOLLOWED	MATERIALS	NOTES
25 Minutes	<p>ACTIVITY 1: WARMER – LINE UP BY BIRTHDAY AND DIVIDE INTO PAIRS</p> <p>ON A SLIP OF PAPER, STUDENTS ANSWER THE FOLLOWING:</p> <ol style="list-style-type: none"> 1. WHAT IS PEER REVIEW 2. WHY IS PEER REVIEW IMPORTANT? <p>SHARE WITH PARTNER FOR 5 MINUTES</p> <p>WATCH LANG LANG VIDEO TO DISCUSS BENEFITS OF PEER REVIEW. ASK THEM WHEN THEY HAVE EVER PEER REVIEWED SOMETHING (FRIEND’S RECIPE, ART WORK, ETC.)</p> <p>PRACTICE A SHORT PEER REVIEW SESSION ON THE ANNOTATED TEXTS.</p> <p>RATIONALE: GOAL 1</p>	<p>Blank slips of paper</p> <p>Computer Projector Screen</p>	<p>Use the Introduction to Peer Review PPT (has link to Lang Lang video)</p> <p>Since most students have been exposed to playing a musical instrument and all are of Chinese ethnicity, the Lang Lang video will be relevant for them. The video will spur a discussion about how peer review can be used in any situation.</p> <p>Give annotation peer review guide so that students understand what they should be thinking about when they peer review the other’s annotations. It asks whether or not the student over annotated or under annotated and why.</p>

Flipping a Chinese University EFL Course: What Students and Teachers Think of the Model

30 Minutes	<p>ACTIVITY 2: RUNNING DICTATION ABOUT SUMMARY</p> <p>WITH SAME PARTNERS: 1. ONE PERSON MEMORIZES, WHILE THE OTHER WRITES 2. SWITCH 3. AFTER GATHERING ALL 10 SENTENCES, PUT THEM INTO LOGICAL ORDER 4. RACE. PRIZE FOR WINNER! 5. CHECK ANSWERS AS CLASS 6. QUESTION AND ANSWER SESSION</p> <p>RATIONALE: GOAL 2</p>	<p>Running dictations slips posted on walls outside classroom, tape</p> <p>Blank paper</p> <p>Summary and response handouts</p>	Give a prize to winning pairs!
20 Minutes	<p>ACTIVITY 3: WATCH A SHORT YOUTUBE VIDEO CREATED BY THE TEACHER.</p> <p>NOW, WITH YOUR PARTNER, SUMMARIZE THE CONTENT OF THE VIDEO IN TURNS IN 3 WORDS, THEN 10 WORDS, AND THEN 15 WORDS.</p> <p>RATIONALE: GOAL 3</p>	YouTube video	Students learn that summarizing is a skill that they will need throughout their lives and that they are always summarizing. Then, they will be more prepared to attempt to summarize an academic text.

HOMEWORK:

1. WATCH IPHONE VIDEO AND SUMMARIZE THE CONTENTS
2. SUMMARY SHOULD BE SUBMITTED ON MOODLE. STUDENTS SHOULD POST THEIR SUMMARY AND THEN RESPOND TO AT LEAST ONE OTHER CLASSMATE'S SUMMARY.
3. REVIEW TRANSCRIPT OF THE IPHONE VIDEO
4. WATCH VOICETHREAD CREATED BY TEACHER ON WRITING A RESPONSE

REFLECTION:

Be sure to spend the last five minutes of class asking students about what they learned in today's class and having them fill in their action logs.

Appendix B

Sentences for Running Dictation about Summary Writing

- The ability to summarize information is very important not only in academic work but also in professional life.
- Summarizing academic work, however, is more technical than how you might normally summarize information when you are with your friends of family.
- For example, when you are with friends, you may or may not mention who the main people in the story are and your story may be different from what actually happened.
- When you are ready to write, typically, three pieces of information are included in the first sentence of a summary.
- These three pieces are: the author, the name of the reading/article, and the main idea.
- Also note that quotation marks are used to enclose the title of the article while italics are used to show that the reading is a book.
- Additionally, the use of reporting verbs ensures that the author's views are given instead of yours
- Summaries are typically written in the present tense.
- When writing your work, do not use all caps to represent their family names.
- To help you complete the rest of the summary writing, you should try to make an outline of the reading.