Part I: Write a few sentences to define the following terms. Give examples when necessary. (20%)

1. discourse analysis

2. contrastive analysis hypothesis

3. the lexical approach

4. focus on form

5. English as a Lingua Franca

Part II: Write two or three paragraphs to answer the following questions. (40%)

1. How can research on L2 learners' interlanguage and developmental sequences help to improve the teaching of L2 grammar?

2. Explain the benefits and limitations of explicit oral corrective feedback.

3. Comment on the statement "most of the mistakes that second language learners make are due to interference from their first language".

4. In your opinion, what should be the relative roles and importance of input and output, inside and outside a foreign language classroom?

5. In your opinion, how can teenage L2 learners' intrinsic motivation for learning English be enhanced in a high-pressure and exam-oriented learning context?

系所班組別：外國語文學系碩士班 乙組 (語言認知與教學組)

考試科目（代碼）：外語教學 (3802)

Part III. Read the article by Hung (2017) attached to the end of the exam to answer the following questions. (40%)

Citation:

Hung, H.－T. (2017). Design‑Based Research: Redesign of an English Language Course Using a Flipped Classroom Approach. *TESOL Quarterly, 51*(1), 180-192.

Questions:

1. Summarize the article in 350 words. Include the following information in the summary: (1) the gaps left by the literature to be fulfilled by the study, (2) the research aim of the study, (3) the participants of the study and how they were grouped, (4) the instruments used in the study, and (5) the findings.

2. The author of the study discussed several second language acquisition (SLA) theories and principles of L2 learning and teaching to argue that the flipped learning model can be applied in language classrooms (see pages 181-182). Do you agree with the author? Comment on one of the SLA theories or principles discussed in the article to support your answer.

3. The author cited Milman (2012) on page 180 (see the end of the first paragraph).

   "Milman (2012) questioned the adequacy of flipping the classroom for second language (L2) learners, and argued that this approach is best reserved for teaching and learning procedural knowledge".

   Do you agree with Milman? Why? Use your knowledge of procedural and declarative knowledge to explain your reason(s).

4. After reading this article, what is your opinion on adopting the flipped learning model in L2 teaching?

tesol QUARTERLY

⊛tesol International Association

Design-Based Research: Redesign of an English Language Course Using a Flipped Classroom Approach

HSIU-TING HUNG
National Kaohsiung First University of Science and Technology
Kaohsiung, Taiwan

Interest in flipped classrooms has proliferated at all levels in the educational domain in the past few years. Although such practices are frequently implemented with slight variations, in a typical flipped classroom students are directed to prepare for class by watching videos as a lecture substitute, and can thus use the freed-up class time more effectively by engaging in active learning activities, facilitated by the instructor and peers (Bergmann & Sams, 2012). Numerous educators have noted various advantages for flipping the classroom, such as enhanced student engagement, increased student performance, and strengthened course designs (see O'Flaherty & Phillips, 2015, for a review of 28 studies on the use of flipped classrooms in higher education). Despite the acknowledged benefits, certain concerns and doubts regarding the flipped classroom approach remain. For example, Milman (2012) questioned the adequacy of flipping the classroom for second language (L2) learners, and argued that this approach is best reserved for teaching and learning procedural knowledge.

Of particular interest to the present study is the feasibility of using the flipped classroom approach to redesign and transform a university-level English as a foreign language course. Accordingly, this article reports on a design-based research (DBR) project that investigated the pedagogical potential of flipped classrooms and involved developing a set of design principles for guiding the future practice of such classrooms in the context of English language teaching (ELT). The following questions were addressed in this DBR project: (1) Did the flipped classroom lead to greater student academic achievement? (2) Did the flipped classroom have a positive effect on students' attitudes toward learning?

UNDERSTANDING THE FLIPPED LEARNING MODEL FOR ENGLISH LANGUAGE TEACHING

It is relatively difficult to theorize the construct of flipped classrooms and to standardize the practice because this approach is still in its infancy. As one early attempt to address this gap, the Flipped Learning Network™ (http://flippedlearning.org) presented a model to characterize an effective flipped classroom. The flipped learning model identifies four major components, or the so-called four pillars of F-L-I-P™, namely, *flexible environment, learning culture, intentional content,* and *professional educator* (Hamdan, McKnight, McKnight, & Arfstrom, 2013). The four pillars, which comprise a set of four design principles, act as a generic guide for educators seeking to flip their classes for improved student learning. Although the flipped learning model appears comprehensive and plausible, its relevance to the specific ELT context has not been established. It is thus necessary to elucidate how this model can be applied to language education settings through the theoretical lens of second language acquisition (SLA) before language educators can embrace flipped classrooms. In what follows, certain SLA perspectives relevant to the four principles delineated in the flipped learning model are briefly discussed in order to provide a theoretical basis for flipping the language classroom.

One defining feature that highlights the flipped classroom approach is its affordance for flexible learning environments, which is denoted as the first pillar of the flipped learning model. This is particularly evident when students are directed to watch instructional videos before class. Under this condition, students can decide where, when, and how they view the material. In language learning, the flexibility of accessing the focal material or linguistic input anywhere, anytime, and at one's own pace is a practical approach to lowering the affective filters of L2 learners. Affective filters are barriers (e.g., anxiety and frustration) that can impede or prevent the acquisition of linguistic input. If SLA is to occur, input must be made comprehensible to L2 learners, and this is achieved with lowered affective filters (Krashen, 1982). Therefore, instruction in a flipped language classroom must ensure a flexible and acquisition-rich environment by addressing the various factors that may affect SLA.

The second pillar states that flipped classrooms shift the responsibility (and power) from teachers to learners, resulting in a student-centered learning culture. In an ideal flipped classroom, students are empowered to exert control and are thus responsible for their own learning. This involves teachers abandoning the role of content experts for knowledge transmission as in traditional classrooms, and instead

they have to better understand the needs of students and facilitate their participation in in-depth learning activities for knowledge construction to occur in flipped classrooms. Language learning, whether in a traditional or flipped classroom, requires extensive exposure to interactions and the authentic use of the target language (cf. Gass, 1997). Therefore, language teachers adopting the flipped classroom approach must ensure that instruction is directed to providing learners with interactive opportunities for maximum use of the L2 during class time. This is even more imperative in foreign language teaching contexts, where the target language is not used outside the classroom.

Another important consideration in flipped classrooms is the use of intentional content to foster student learning in preclass and in-class activities, as represented by the third pillar of the flipped learning model. With the predominance of the communicative language teaching approach (cf. Littlewood, 1981) in contemporary language classrooms, it is widely accepted that instruction should provide opportunities for language learners to focus predominantly on meaning, while also directing their attention to form. From an interactionist SLA perspective, language learners should be supported by a careful instructional design, in which the key linguistic characteristics of the input are made salient (Chapelle, 1998). These insights should be integrated into the development of content and associated delivery methods when flipping a language classroom. Overall, the design and use of content material should explicitly cater to the students' development of fluency through L2 communicative practices.

The final pillar concerns the importance of the teacher's role. Although a considerable amount of direct instruction is often replaced with out-of-class instructional videos, teachers in flipped classrooms still assume a crucial role because they constantly make instructional decisions regarding when and how to flip or respond to situation-specific conditions to better meet learner needs. The emergence of the flipped classroom approach fits well with what Kumaravadivelu (1994) termed the "postmethod condition" in L2 teaching, which "empowers teachers with knowledge, skills, and autonomy" (p. 27). In practical terms, teachers are required to develop classroom techniques *in situ* to maximize the effectiveness of L2 teaching in this emerging postmethod era. The utilization of the flipped classroom approach can thus be used to enhance courses that have been taught in a traditional fashion. By doing so, teachers can reconstruct their ways of thinking and teaching in response to the changing demands of the teaching profession.

The flipped learning model described above, as signified by the FLIP acronym, provides a concise but inclusive framework for the current study in its endeavor to contextualize the instructional design of flipped classrooms in ELT settings. As flipped classrooms continue to rise in popularity, various conceptual frameworks featuring different components of effective learning are being proposed for teachers to frame their instructional design. Two relevant instances are the FLIPPED model (Wang, Chen, & Chen, 2014) and the seamless flipped learning model (Hwang, Lai, & Wang, 2015), which integrate the use of diversified platforms or mobile technologies to enrich the flipped learning environment. Since current practices of the flipped classroom approach are rather broadly defined, it is necessary for teachers and researchers to devise specific conceptual or design frameworks to address their local needs.

METHODOLOGY

Design-based research (DBR) is defined as a methodology that uses a "theory-driven design to generate complex interventions that can be improved through empirical study and that can contribute to more basic understanding of the underlying theory" (Design-Based Research Collective, 2003, p. 7). Many language educators have applied this methodology to iteratively revise and refine their own course designs (e.g., Egbert, Herman, & Lee, 2015). Given the twofold aim of DBR, it is deemed appropriate to enhance the implementation of flipped classrooms and advance the design framework (i.e., the flipped learning model) adopted in the current study.

Site and Participants

The research site was a skill-based English course for which I played the dual role of teacher and researcher. The participants were a sample of 43 Taiwanese university sophomores enrolled in two sections of the course. The female-to-male ratio was 2.3 to 1. They were intermediate-level English language learners, with an average of 8 to 10 years of experience in formal English education. Before starting this course, a number of participants had experienced blended learning, but none of them had ever studied in flipped classrooms.

Instructional Design

The main course objective was to develop English communicative competence through various interactive activities. A well-known sitcom, *Friends,* was thus employed as the primary learning material, and a total of 10 episodes were selected. This material was then integrated

into the 18-week curriculum, with the first 4 weeks being devoted to training in the use of language-learning strategies, 10 weeks serving as the main language-learning lessons centering on the *Friends* episodes, 2 weeks being spent on a midterm review, and the last 2 weeks being used for assessments.

This DBR project consisted of two action studies, with the first functioning as a baseline design, and the other as a redesign of the observed course. The course requirements, content, and instructor were held constant to generate comparable conditions.

The 22 students in the baseline course were instructed in a relatively conventional manner through the use of the mainstream approach of communicative language teaching (CLT). The weekly routine for teaching and learning *Friends* episodes comprised three major steps, which required 2 hours. First, I provided a mini-lecture that summarized the plot and highlighted important vocabulary items, as well as any cultural information that was needed to enhance student comprehension. Next, the entire class watched the scheduled episode with English subtitles. The students were also encouraged to take notes whenever they deemed it necessary. Last, I organized the students into small groups and designed a list of discussion questions based on the video content to guide their interactions. I then asked for volunteers or called on students to summarize their group discussions for the whole class to conclude the weekly lessons. No specific homework was assigned for the weekly lessons, but I recommended that the students review the material in preparation for the summative assessment at the end of the course. In brief, this instructional design enacts major tenets of CLT by utilizing authentic videos as discussion prompts and emphasizing L2 interactions through communication activities. It is worth noting that although the CLT approach is essentially student-centered, the teacher still plays a prominent role in organizing classroom-related activities.

A flipped classroom was created for 21 students enrolled in the redesigned course, with a total of 10 flipped lessons. Each lesson contained a preclass learning phase and an in-class learning phase. In the preclass learning phase, the students were instructed to watch the weekly scheduled *Friends* episodes on their own. They also had a worksheet on which they were asked to generate a list of questions based on the episodes. The in-class learning phase lasted 2 hours, during which three types of interactive tasks were conducted. First, the students worked in groups of four or five and shared the worksheets that they had completed in

advance. Acting as a guide, I circulated around the classroom to respond to any queries that the students raised. As a small group, the students were to collectively choose two questions, one content-based and the other experience-oriented, to be posed later to the entire class. Second, the students elected their own group representatives to lead the class discussions based on their group-generated questions. The rest of the class competed in groups to answer the questions. I played the role of a facilitator by providing supplementary explanations and replaying parts of the videos when required. Third, the students were organized into randomized pairs of conversation partners, taking turns posing and answering each other's questions through reciprocal questioning. In short, this flipped classroom placed students at the center of the learning process, featuring the use of student-generated questions before class, with follow-up student-led discussions in class.

Instruments

I collected multiple data for this DBR project to triangulate the research findings, and each data collection procedure is outlined as follows.

An end-of-term examination based on the course content was administered to assess the students' English learning and achievement as part of the course requirements, which also served as the posttest of the study. This assessment was comprised of three sections with 100-point intervals, namely vocabulary (30%), listening cloze (30%), and individual speaking tests (40%). Each student's total score was used as a measure of academic performance in the observed course.

I devised an attitudinal questionnaire to elicit affective responses from participating students (see the Appendix). It was administered after the end-of-term course examination. The 5-point Likert questionnaire contained 15 items allocated to three scales. The first scale included five researcher-developed items to understand the students' satisfaction with the course. The second scale was composed of three items adapted from Biggs, Kember, and Leung (2001) to assess the students' in-depth or active learning attitudes. The last scale was adapted from MacIntyre, Dörnyei, Clément, and Noels (1998) to measure how participating in the observed classroom influenced the students' willingness to communicate (WTC).

As the teacher–researcher in this DBR project, I was able to conduct direct observations and reflect on the course. Three questions were used to guide my self-reflection on teaching: (1) Did the designed learning activities in this lesson work well? (2) Were any events or

issues notable in relation to student participation? (3) What could be modified to strengthen the course design? I used these data to supplement my interpretations of the student learning outcomes measured by the other two instruments described above.

RESULTS

Effect of the Flipped Classroom Approach on Students' Academic Achievement

To investigate the differences in academic performance between the two groups, the descriptive statistics of the posttest for each group were computed, and further analyzed using an independent-samples t-test. The results revealed that the students in the flipped classroom ($M = 77.67$, $SD = 6.00$) outperformed those in the non-flipped classroom ($M = 71.36$, $SD = 6.71$) with a significant difference ($t = -3.241$, $p = .002$, Cohen's $d = .990$). While the test was developed to assess the students' English learning with regard to vocabulary, listening, and speaking skills, no meaningful difference was found among these specific aspects of performance. By and large, the results suggest that learning in flipped classrooms is more likely to lead to greater student performance in coursework than otherwise.

Effect of the Flipped Classroom Approach on Students' Attitudes Toward Learning

The participating students' attitudes toward learning were measured using the post-intervention attitudinal questionnaire. Table 1 lists the descriptive statistics of the two groups' responses in the questionnaire based on the three scales, along with the group comparison results of independent-samples t-tests. Regarding the course satisfaction scale, the results revealed that both groups were highly satisfied with their respective course designs. Although no meaningful difference emerged ($t = -1.009$, $p = .319$), the students in the flipped classroom were found to have higher means. One reasonable explanation for the lack of significance in course satisfaction is that both classrooms were constructed using student-centered pedagogical approaches. In terms of the active learning scale, the difference between the two groups was significant ($t = -8.985$, $p < .001$, Cohen's $d = 2.741$). The two groups also differed significantly in the WTC scale ($t = -6.511$, $p < .001$, Cohen's $d = 1.986$). Overall, the results suggest that the flipped classroom approach has a positive effect on students' learning attitudes.

DISCUSSION

The current study examined the effects of flipping the classroom for English language learners on students' academic achievement and

learning attitudes. The overall results confirmed the feasibility and potential of this approach with regard to both outcomes. Whereas the flipped classroom approach appears to have received more attention from researchers in science, technology, engineering, and mathematics (STEM subjects), its effects in enhancing students' subject-matter learning (in this case, English as a foreign language) and learning engagement were consistently observed in the present study, as well as in other studies conducted with humanities subjects (e.g., Kong, 2014). These findings thus confirm the view that the flipped classroom approach may be applicable to a wide array of disciplines (Khan, 2012). Although some educators, like Milman (2012), have reservations about using this approach for language teaching, given the encouraging results reported in an increasing number of studies on flipped language classrooms (e.g., Chen Hsieh, Wu, & Marek, 2016), this approach is now receiving wider support from language educators (e.g., Brink Lockwood, 2014). The findings of this study lend further support for the growing need to apply this approach to ELT contexts. Furthermore, the trend in favor of flipped classrooms can be seen in a considerable number of presentations that were made at the 2015 TESOL convention in Toronto (Kostka & Brink Lockwood, 2015). It is thus reasonable to assume that many more articles will be published in the near future to expand our knowledge about what works for English language learners, under what conditions of flipped learning environments.

Methodologically, the flipped learning model developed by Hamdan et al. (2013) provides a helpful design framework for this DBR project. Drawing on the present research findings, a set of design principles are further appropriated for language education on the basis of the adopted framework. Accordingly, the design principles derived from this work are offered specifically for language educators interested in flipping the classroom, and these are presented below.

TABLE 1

Comparison of Group Differences in Students' Responses to the Attitudinal Questionnaire

Questionnaire Scales	Non-flipped classroom $(N = 22)$		Flipped classroom $(N = 21)$		t	p
	Mean	SD	Mean	SD		
Course satisfaction	4.22	.31	4.32	.38	−1.009	.319
Active learning	3.48	.32	4.43	.37	−8.985	.000*
Willingness to communicate	3.73	.46	4.48	.27	−6.511	.000*

Note. Significance *$p < .05$.

- The *F* principle of a flexible language learning environment: Provide comprehensible input with flexibility, accommodating individual preferences and proficiency levels, as a means for creating acquisition-rich flipped classrooms for L2 learners.

- The *L* principle of a language learning culture: Offer interaction opportunities by using active learning strategies to increase learners' L2 exposure and use in the flipped classroom.

- The *I* principle of intentional linguistic content: Design a mechanism with intentional content focusing on target meanings and forms of L2 to connect the preclass and in-class activities of the flipped classroom.

- The *P* principle of a professional language educator: Maintain up-to-date professional knowledge and skills to build a transformative learning community in the flipped classroom that empowers L2 learners to be active and responsible for their own learning.

The proposed principles can act as a referential guide or a design framework for constructing flipped language classrooms in future studies. Additionally, prospective research can further validate the applicability of the four design principles developed in this DBR project.

As shown in this study and previous research (e.g., Hung, 2015), teaching by using the flipped classroom approach is satisfying because it creates a flexible learning environment that enables language learners to preview and review the intentional content of linguistic input according to their proficiency levels, which in turn boosts their participation levels in output-based activities and enhances their interactions with peers and teachers. In this study, the engaging learning culture in the flipped classroom was evidenced by the students' willingness to communicate in L2 and active participation in student-centered discussion activities. Although learning challenges are occasionally identified in the literature (e.g., Howitt & Pegrum, 2015), on the whole they do not seem to adversely affect student engagement in flipped classrooms. This is evident in the present study and others (e.g., Lai & Hwang, 2016), in which, through participation in carefully designed flipped classrooms, students gradually become active learners and are constantly motivated to assume control over their own learning. It is worth noting that the transformation of learning and teaching that is envisioned in the use of flipped classrooms requires not only active learners, but also professional educators who seek to improve their expertise. This study has demonstrated that, in the flipped classroom where valuable class time is freed up to be used for active learning activities, a professional language educator should seize the opportunity to provide just-in-time teaching that is more responsive to

students' needs (e.g., offering formative feedback and playing video highlights with supplementary explanations). Furthermore, Ellis (1997) suggested that conducting classroom-based research and developing relevant theoretical understandings are practical approaches available to SLA researchers and educators for the development of more effective language pedagogies. The DBR methodology adopted in the current study echoes this claim, with its twofold aim to refine both the theory and practice of the implemented pedagogy (i.e., the flipped classroom approach). Language educators wishing to flip their classrooms are thus recommended to conduct DBR as a way to improve their courses in a systematic manner, in order to grow professionally as both teachers and researchers.

CONCLUSION

This work adds to the growing literature on flipped classrooms and encourages language educators to envision how the flipped classroom approach can enhance traditional courses, using the F-L-I-P principles to guide the design of the learning environment. The present research findings as a whole show the great promise of flipping the classroom for university-level English language learners. Nonetheless, generalization of these results is limited due to the relatively low number of participants. It should also be recognized that the favorable learning outcomes observed in this particular research site may not be applied to the broader context of ELT, due to the composite nature of a flipped classroom and some ambiguities in its definition. Put differently, in establishing a flipped classroom many contextual factors (such as content delivery, learning activities, learner characteristics, and teacher knowledge) may come into play, making it difficult if not impossible to rule out all confounding variables with regard to any positive outcomes that are found. This has been the case for almost all classroom-based research or DBR that has set out to examine the efficacy of a certain pedagogy or the influence of any other complex variables. Despite these limitations, this work does take a crucial step toward conceptualizing the flipped classroom approach as a valuable effort to transform traditional courses through a DBR process, and still offers vital insights into the pedagogical potential of flipped classrooms in ELT contexts.

(Acknowledgments and references deleted for space considerations)