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THE VALUE OF ADDING A FLIPPED LEARNING COMPONENT TO A HUMANITIES COURSE IN HIGHER EDUCATION: STUDENT PERCEPTION AND PERFORMANCE

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ABSTRACT

Given that most humanities courses in higher education are already interactive and constructive, it is not clear whether a flipped model of learning adds any additional value to student learning. This study assessed the impacts of flipped learning on EFL learners' performance and perceptions of a two-semester linguistics course in a Taiwan university. For the flipped units, EFL students learning linguistics in the partially flipped classroom viewed instructor-made videos prior to the scheduled class and then participated in class activities, which required analysis and evaluation of the concepts acquired from the videos to solve real-world problems. For other units, students experienced learning via live lectures. Student responses from a questionnaire indicated that the flipped model promoted higher-order thinking and made differentiated and self-paced learning possible. Video lectures were favored over textbook chapters, but not over live lectures. The results of correlational analyses between questionnaire items and exam performance indicated that success in flipped learning depends on students' appreciation of the cohesive alignment of prerecorded lectures and in-class activities to support learning and investing time in video lectures. There was no evidence that devoting 28% less class time to transmitting knowledge over the two semesters impaired exam performance in the flipped students when compared to the students taking the same course but with live lectures in the previous year. This article calls for a careful reexamination of how to balance the use of flipped learning and live lectures in humanities disciplines in higher education.

Key Words: flipped learning, humanities courses, student perceptions

INTRODUCTION

This article aims to extend the current body of research on flipped learning by including a humanities course taken by college students who learn English as a foreign language (EFL). Unlike courses in science, technology, engineering, and mathematics (STEM), courses of humanities and social sciences are mostly interactive and constructive and in a sense have been flipped for decades (Berrett, 2012). Students do not simply sit in the class passively. Rather, they are invited to interpret and construct knowledge together with the instructor. If the class is already interactive and involves more than the transmission of knowledge, what is the value of adding a component of flipped learning into a class? Do students feel lost and unguided when they can construct knowledge with the instructor in and through dialogues in a traditional classroom but are asked to 'flip-learn' the course content on their own via non-interactive videos at home? Does the flipped model of learning pose challenges to EFL learners, who learn conceptual knowledge via a foreign language?

The flipped model of learning has gained popularity as one of the most effective strategies to promote self-learning and maximize class interaction (e.g., Deslauriers, Schelew, & Wieman, 2011; Hung, 2015). Students in a flipped classroom watch video lectures outside of the classroom before attending class. During regular class times, they work on 'homework' or solve problems (O'Flaherty & Phillips, 2015; Pierce & Fox, 2012). In a sense, flipping a classroom involves inverting school work and homework from the traditional scheme of learning. Although there are various forms of flipping, lecturing via videos is seen as a key component in the flipped instructional approach (Choi & Lee, 2015). The use of videos allows students to control the pace of the lecture, learning on their own time, at their own pace. By providing flexibility in the pace, flipping through the use of video can be seen as a pedagogical approach to the differentiated instruction advocated by Tomlinson (2003).

While flipping a classroom is commonly understood as reversing time and space for learning, flipping a classroom does not necessarily lead to flipped learning. Flipped learning should go beyond the knowledge domain, repurposing class time for higher-order learning, such as applying, analyzing, or evaluating the concepts covered in prerecorded lectures (Roehl, Reddy, & Shannon, 2013). If class activities in a flipped classroom involve no more than teacher checking how much students have 'remembered' and 'understood' of a prerecorded lecture,

what is flipped is only time and space of learning activities. Learning in itself is still centered on a passive, low-level reception of knowledge. The present article reports on a small-scale, localized study on flipped learning a humanities course for EFL learners in Taiwan. The rationale for such a study is described below.

Discipline Gaps in Flipped Learning Research

Although many studies have examined the effectiveness of flipped learning in higher education, there exist discipline differences. These research gaps need to be addressed given that innovations in teaching should take a disciplinary perspective to maximize its effect (Neumann, Parry, & Becher, 2002). In a scoping review of 28 articles in higher education from five countries, O'Flaherty and Phillips (2015) concluded that the various forms of flipped learning they reviewed generally improved students' academic performance and course satisfaction. However, they and others (e.g., Berrett, 2012; Hung, 2015) also noticed that most of the reported studies on flipped learning came from STEM disciplines. Examples of flipped learning in STEM include general science (González-Gómez, Jeong, & Rodríguez, 2016), computer technology (Choi & Lee, 2015; Shyu & Hsiang, 2016), pharmacotherapy (Pierce & Fox, 2012), physics (Deslauriers et al., 2011), and math (Chen, Yang, & Hsiao, 2015; Love, Hodge, Grandgenett, & Swift, 2014).

In contrast to the rapid growth of studies in the STEM disciplines, relatively fewer reports are from non-STEM disciplines (Forsey, Low, & Glance, 2013; Hung, 2015; O'Flaherty & Phillips, 2015) and virtually none for EFL learners who study disciplinary content through a foreign language. Outside of the STEM disciplines, sporadic reports of successful implementation of flipped learning can be found in economics/business (Findlay-Thompson & Mombourquette, 2014; Olitsky & Cosgrove, 2016; Roach, 2014), education (Zainuddin & Attaran, 2016), and sociology (Forsey et al., 2013). Olitsky and Cosgrove (2016) reported that the flipped model of learning yielded higher exam scores in students of economics than traditional pedagogy, but the increase was modest. Findlay-Thompson & Mombourquette (2014) flipped an introductory business course and found no significant differences in exam scores between the flipped and the traditional class. Forsey, Low, and Glance (2013) reported some positive opinions from students about a flipped sociology class. Collectively, the findings are

not yet conclusive in generating guidelines for effective implementation of flipped learning in the disciplines of humanities and social science.

The relatively fewer reports of flipped learning in humanities courses may be attributable to discipline differences in teaching approaches. Disciplines like STEM are cumulative, discrete in nature (Becher, 1987) and their curricula tend to be linear and hierarchical (Neumann et al., 2002). In contrast to teachers of humanities and social science, STEM instructors draw less on interactive teaching (Norton, Richardson, Hartley, Newstead, & Mayes, 2005). Thus, instruction in STEM is easily and readily adapted to the flipped model of learning: moving knowledge transmission to videos and leaving class time for problem-based learning. In contrast, disciplines like humanities are holistic, reiterative and spiral in nature (Becher, 1987). Teaching and learning tend to be 'constructive and interpretive' (Neumann et al., 2002). Class lectures in humanities typically emphasize a formative process, by which the instructor and the students construct meanings and make sense of the content knowledge together.

The way content knowledge is constructed in humanities and social science cannot easily be duplicated from one class to another or replicated in a video format. In a sense, video lectures can diminish or mischaracterize the teacher's role in humanities courses and transform a process of knowledge construction to a process of knowledge transmission. Lack of interactivity has been a concern of e-learning by some humanities teachers (e.g., Manel, 2010). A recent study showed that students of psychology reported less interest and lower motivation for video lectures than for live lectures (Varao-Sousa & Kingstone, 2015). The same study also showed that the students retained less information from video lectures. These findings highlight the significance of the social presence of a professor for students of humanities and social science. Given that disciplines like humanities and social science are characterized by multiple paradigms of teaching and researching (Biglan, 1973), it is important to see whether and how the flipped model of learning contributes to adding value to a humanities course, which is already dynamic and interactive from the students' point of view. This article reports a small-scale case study. Small-scale, localized interventions are considered necessary prior to large-scale implementation of flipped learning to gather information about "the efficacy of the flipped classroom approach in *this* discipline, *this* classroom, with *these* students" (italics added; Abeysekera & Dawson, 2015).

Flipped Learning for EFL Learners of Humanities

In higher education, there are EFL learners who study disciplinary content through a language they are studying. Although some studies have documented positive learning outcomes in EFL learners receiving the flipped model of learning, the courses under investigation are essentially English language learning courses rather than courses on disciplinary content (e.g., Hung, 2015, 2017; Kang, 2015). It is not clear how EFL learners perceive learning disciplinary material through a flipped model of instruction. On the one hand, EFL learners of disciplinary content may not make full use of video lectures delivered in a language foreign to them. While the language of instruction does not play a major role in the acquisition of STEM knowledge (Ho, 1982) or in scientific problem solving (Neumann et al., 2002; Tatzl & Messnarz, 2013), it is critical to humanities students. In a study of the efficacy of flipping an English learning course, Kang (2015) found that even students at a CEFR B2 level requested complete scripts for videos they watched. The challenge can be even greater for gaining disciplinary knowledge in a foreign language. Figlio, Rush, and Yin (2013) found that students who learned academic content from another language demonstrated lower performance from video lectures than from face-to-face instruction. Such being the case, flipped learning may prove successful in learning disciplinary content via the students' L1 or in learning a foreign language, but may not be as effective in learning disciplinary content (especially humanities) delivered in a foreign language. In fact, there is some concern that instruction in a foreign language may hamper content acquisition even in face-to-face settings (Yeh, 2012).

On the other hand, the language barrier experienced by EFL learners of humanities may be overcome in flipped learning. EFL learners with different levels of English proficiency can control the pace of the lecture, viewing the videos on their own time, at their own pace. By providing flexibility in the pace, flipping through video allows learning to be differentiated for individual students. Thus, in a sense, flipped learning provides an avenue to differentiated instruction advocated by Tomlinson (2003) as it gives students choices about when, where, and how they master the key concepts and necessary facts on their own.

The Research Context

In response to the literature gap in the humanities and in EFL

learners of disciplinary content, this study attempted to capture the effectiveness of a flipped introductory linguistics course, if any, in students who study academic content through a foreign language. Like many introductory courses in higher education, Introduction to Linguistics covers a variety of subfields, each of which has grown into a full-fledged academic discipline. Lecturing is typically considered as a convenient and time-honored way of imparting all the essential information within the time frame of the course, though the individual instructor may have adopted an interactive mode of lecturing. A unit is typically covered in the two or three scheduled hours a week. Incorporating higher-order learning activities for a unit just learned for that week in class is difficult as many students are still novices of the material and are unlikely to make meaningful contributions to higher-order learning activities. This is especially true for EFL learners, for whom inadequate preparation provokes anxiety and undermines the quality of discussion in class (Liu, & Jackson, 2008; Peng & Woodrow, 2010). One solution to the competition for class time between comprehensive content coverage and higher-order learning is the flipped model of instruction. This study probed this solution by surveying students' perceptions about the course and comparing their learning outcomes with those taking the same course from the same instructor in the previous year.

The purpose of the present study was to investigate how EFL learners taking a linguistics course perceived a partially-flipped model of learning given that the live lectures they experienced were already dynamic and interactive. In addition, we also examined whether the flipped model of learning impaired the acquisition of basic course content considering that a portion of class time for knowledge transmission was used for activities.

METHODOLOGY

Participants

The participants were first-year undergraduates majoring in English as a foreign language in Taiwan. Study participants took a two-semester introductory linguistics course to fulfill the coursework for the degree of English Language Education. The students were not only language learners but also learners of disciplinary content via a foreign language.

There were two cohorts. One cohort experienced a flipped learning model for the course. The other cohort consisted of students from the previous year taking the same course via conventional live lectures. The two cohorts of students were recruited with the same criteria. At entry into the university, the English proficiency levels of the students were at the top 15% on the General Scholastic Ability Test for Taiwanese high-school graduates. At exit from the university, over 90% of the students achieved an English proficiency level equivalent to CEFR B2 or higher. The two cohorts of the students were judged to have similar English proficiency levels upon taking the course. Only students who completed the course over the two semesters were included in the analysis ($N = 43$ for the flipped cohort and 41 for the live-lecture cohort).

Research Design

The two cohorts of students used the same textbook and had the same instructor (the first author). Students enrolling in Introduction to Linguistics met two hours per week over two semesters.

The live-lecture cohort. The live-lecture cohort met 64 hours over the two semesters, excluding test days. The face-to-face meetings consisted of interactive lectures, with occasional in-class exercises and quizzes. In addition to instructor lecturing with power-point slides and students taking notes on handouts, students were asked to reflect on the examples given by the instructor, generate examples, or correct statements about a linguistic term. Another characteristic of the live lectures was the occasional interspersion of 'bombs,' a term used by students. The 'bombs' perceived by the students were designed by the instructor. They were intended to be confusion-raising statements or questions designed to challenge students' false sense of understanding. As pointed out by some scholars (D'Mello, Lehman, Pekrun, & Graesser, 2014; VanLehn, Siler, Murray, Yamauchi, & Baggett, 2003), the 'bombs' provoke students to think further. In a sense, the face-to-face meetings for the live-lecture cohort were interactive, at least between the instructor and the learners, though not between students. They were also constructive, involving questioning and the challenging of assumptions.

The flipped cohort. The course for the flipped cohort was partially flipped. Like the live-lecture cohort, the flipped cohort met 64 hours over the two semesters, excluding test days. However, 28% (18 hours) of the class time was devoted to flipped learning. The remaining 72% of class

time still followed the conventional format, the teacher lecturing and soliciting interaction from students by challenging students' false sense of understanding. For units assigned to flipping, students needed to watch a video before attending the class and prepare for pre-instruction quizzes or assessment. The flipped cohort learned all the materials that the live-lecture cohort had learned. Content coverage was not reduced. However, their learning of the flipped units was extended. For example, the unit on idiolects was extended to cover forensic linguistics; the unit on linguistic ambiguity went beyond lexical and syntactic ambiguity and covered scope ambiguity; the unit on phonemes went beyond the description of the phonemic system of English and covered the perceptual effect it may have on second language learners. The extension was affordable because, without dialogues between the instructor and the students, a short video could cover the materials delivered for 50 minutes in class, making it possible to redirect class time to extend the depth and/or type of the concepts covered in a video lecture. Units not assigned to flipped learning were conducted in a similar way as for the live-lecture cohort. Thus, the flipped cohort experienced two modes of learning: flipped and interactive live lectures of the same course. See Table 1 for the time scheme of the course for the flipped cohort and the live-lecture cohort over a semester.

Table 1

Time Scheme for the Flipped Cohort and the Live-Lecture Cohort over a Semester

	Live-lecture cohort		Flipped cohort		
Week	Class time		Video	Class time	
1	Unit 1a	Unit 1b		Unit 1a	Unit 1b
2	Unit 2a	Unit 2b		Unit 2a	Unit 2b
3	Unit 3a	Unit 3b	Unit 3a	Problem-solving	Unit 3b
4	Unit 4a	Unit 4b		Unit 4a	Unit 4b
5	Unit 5a	Unit 5b	Unit 5a	Problem-solving	Unit 5b
6	Unit 6a	Unit 6b	Unit 6a	Problem-solving	Unit 6b
7	Unit 7a	Unit 7b		Unit 7a	Unit 7b
8	Unit 8a	Unit 8b	Unit 8a	Problem-solving	Unit 8b
9	Midterm			Midterm	
10	Unit 9a	Unit 9b		Unit 9a	Unit 9b
11	Unit 10a	Unit 10b	Unit 10a	Problem-solving	Unit 10b
12	Unit 11a	Unit 11b		Unit 11a	Unit 11b
13	Unit 12a	Unit 12b	Unit 12a	Problem-solving	Unit 12b
14	Unit 13a	Unit 13b	Unit 13a	Problem-solving	Unit 13b
15	Unit 14a	Unit 14b		Unit 14a	Unit 14b
16	Unit 15a	Unit 15b	Unit 15a	Problem-solving	Unit 15b
17	Unit 16a	Unit 16b	Unit 16a	Problem-solving	Unit 16b
18	Final			Final	

Design Process of the Flipped Units

The units chosen to be flipped were designed in a backward manner. Lesson planning started with a specification of learning outputs; learning content and input materials were developed on the basis of the learning

outputs (Richards, 2013). The instructor first identified the desired goals for in-class activities, determined the knowledge or the concept needed to meet the goals, and then selected and developed instructional materials for the videos. It was the desired goal that was to be achieved in the class that led the organization of the learning material in the video. In-class activities were designed to engage students in higher-order levels of learning in the hierarchy of Bloom's taxonomy (1984) and in Facione's cognitive operations of critical thinking (1990). These activities required analysis, inference, evaluation, and self-correction of the concepts acquired from the video. After the goal for the in-class activity was identified, videos were tailored to serve the goal. See Figure 1 for the course design process. One unit, phonemes, is given as an example. The students' learning process was reversed. They viewed the video of basic learning content first and answered some simple questions in the video or in class to check whether they had acquired the prerequisite content knowledge for class activities. Finally in class, they were given problems to solve collaboratively with fellow students during class time. The problems placed linguistics in a real-world context and required students to operate in the upper levels of Bloom's taxonomy, analyzing, evaluating, and creating.

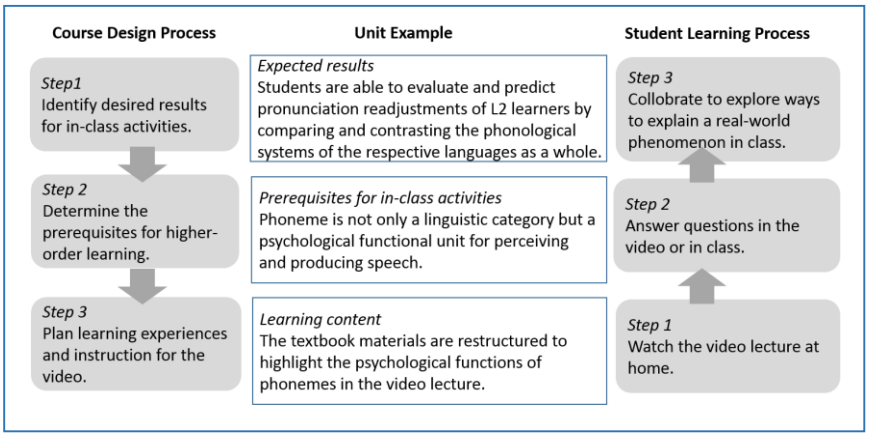

Figure 1. The desgin process for the flipped unit of phoneme

In-class activities. In-class activities included three phases, Think-Discuss-Share, similar to the Think-Pair-Share cycle designed by McTighe and Lyman (1988). In the scheduled hour for flipped learning, the class began with a 5-minute session of question and answer. A 'quiz'

was then administered. Students worked on the quiz questions individually. This constituted the 'Think' phase. Some questions were later assigned for group discussion or activities. In the 'Discuss' phase, students were randomly assigned to groups of three members for discussion. The instructor moved around the groups to provide just-in-time instruction in small, focused doses. Small group discussion leads to more language-related episodes than pairs for EFL learners (Dobao, 2014). Three was considered optimum as it maximized the likelihood for each member to contribute their ideas and reach a solution within a short period of time. In the 'Share' phase, each group shared or role-played the results of the discussion. Students did not know which quiz questions would appear in the 'Discuss' and the 'Share' phases beforehand so that they had to work to the best of their ability on each question in the 'think' phase. The questions assigned for 'Discuss' and 'Share' required application, analysis, or evaluation of the video topic for the week. For example, the activities for the video 'Language, Sex, and Gender' required the students to evaluate two empirical studies on the effects of grammatical gender on human perception and categorization of objects. Students worked in a group and predicted, for example, whether speakers of different languages perceive an object (e.g., a key) differently given that the word 'key' is marked as masculine in one language but feminine in another. Students also produced a reasoned critique about whether the newly developed Mandarin term 'little fresh flesh' (young, attractive man) was a sexist term that objectified men.

Video. In total, 18 videos were created and recorded by the instructor for the flipped cohort over the two semesters. The language of the videos was English, a foreign language to the students. The average length of the video lectures was 11 minutes (ranging from 5'12'' – 17'05''). The videos were created through PowerPoint with animation to direct viewer attention to the visual images or words on the screen at "lecturer chosen" points. These animated effects were designed to bring abstract ideas into life and help the viewers organize their thinking process. Representational and organizational animations improve learning outcomes more than static pictures and decorational animations (Höffler & Leutner, 2007). PowerPoint was used because the instructor was already familiar with the software and thus could customize and update the video content at any time when necessary.

Instrumentation

Questionnaire of student perceptions and practices. A questionnaire was created to elicit information about student perceptions and practices for the partially-flipped learning model. The questionnaire was developed on the basis of relevant literature and the results of a semi-structured interview with three students by the course assistant. In the pilot phase of the questionnaire development, three students, with high, average, and low scores in the midterm exam of the 2nd semester, were invited for an interview. The interview started with a general question, "What are the differences you notice between this course and other courses in college?" The interview was used to identify students' experience or perceptions specific to the course and explore how students interpreted a question. For example, all three students in the interview used the term 影片 'video' to refer to online video lectures, and 課堂討論 'class discussion' as an umbrella term to refer to the various class activities. These expressions were written into the questionnaire.

The final version of the questionnaire contained fourteen items written in Chinese, using a 5-point Likert scale. Nine of the 14 items targeted student perceptions. Examples of perception statements are: 'Video viewing is essential to successfully participating in class activities;' 'I understand better by viewing videos than by reading textbook chapters;' 'Videos are more interesting than live class lectures;' and 'In-class activities reinforce learning the concepts in the videos.'

Five items were about students' actual practices of flipped learning. Examples of practice statements are: 'I usually watch videos before attending class;' 'I usually scroll back to watch an earlier portion of the video;' and 'I usually actively participate in group discussion.' The respondents also indicated the average number of times they watched the video.

Finally, there were three open-ended questions: 'What is your most favorite aspect of the course?', 'What is your least favorite aspect of the course?', and 'What aspect of the course can be improved?' Though the flipped units were designed to promote higher-order learning of the course content, we did not choose to measure students' perception of higher-order thinking directly in terms of discrete units with standardized measurements because the course was not designed to teach critical thinking directly and explicitly. According to a meta-analysis of 31 intervention studies, direct instruction on critical thinking only results in an average effect size (0.20 SD increase) in standardized measurements

of critical thinking (Niu, Behar-Horenstein, & Garvan, 2013). Given that the present study did not give direct instruction on critical thinking, a standardized test of critical thinking may not capture, if any, perceived changes in critical thinking. Instead, we chose to leave the questions open. Critical thinking is a reflective way of thinking and a 'self-adjusting process of judging what to believe or what to do in a given context' (Facione, 2000). It is a process of higher-order thinking rather than specific individual learning outcomes (Garrison, Anderson, & Archer, 2001). The open-ended questions were thus phrased broadly and were not suggestive in any way leading to a particular aspect of the course. If the students perceived that the flipped model of learning promoted critical thinking, they should mention this in their own words in the open-ended questions.

To assure ethical treatment of the students, the course assistant administered the questionnaire without the presence of the instructor. She assured the students that the data would remain anonymous to the instructor until after the grades had been turned in.

Exam performance. Exam scores were collected to see whether the two cohorts differed in mastering the basic course content. There were four exams over the two semesters. The original design was to use the same copies of exams for the two cohorts of students. However, the instructor soon discovered that the exam questions of the previous year could not cover all the content that the students learned in the flipped class. Thus, except for the first exam, the next three exams for the flipped cohort only covered 94%, 87%, and 76% of the exam questions created for the live-lecture cohort. The rest of the exam question items were mostly new to the live-lecture cohort. The decrease reflected an adjustment on the part of the instructor. As she gained more experience with the flipped practice, she had the tenacity and confidence to expand the repertoire of the academic content. Analyses for exam performance were based on the percentage scores for items shared by the two cohorts.

RESULTS

Student Perceptions and Practices

Out of the 43 students in the flipped cohort, 38 (88%) completed the questionnaire. Table 2 displays detailed results of all the items for the perception dimension and the practice dimension. Students' perceptions

about the flipped learning were mostly favorable. The majority of the respondents agreed or strongly agreed that previewing videos was important to the participation of in-class activities (87%) and that in-class activities and discussion reinforced learning of the concepts covered in the videos (84%). Most students (68%) also agreed that in-class activities promoted higher-order understanding of the videos. None disagreed. When asked about whether they wished for more video lectures and more in-class activities, most respondents were positive (54% and 66%) or neutral (41% and 32%). Few disagreed. About 74% of the respondents gave a favorable overall rating for flipped format of learning. However, there was still a noticeable proportion of the respondents (11%) who disagreed with the statement that they enjoyed flipping.

Table 2

Student Responses on the Questionnaire and Correlations with Exam Performance

Item	SA (%)	A (%)	N (%)	D (%)	SD (%)	*r*
Perception						
1. Video viewing is essential to successfully participating in class activities.	34.2	52.6	13.2	0.0	0.0	.08
2. I understand better by viewing videos than by reading textbook chapters.	31.6	52.6	13.2	2.6	0.0	.11
3. Videos help me understand better than live class lectures.	2.6	21.1	60.5	15.8	0.0	-.19
4. Videos are more interesting than live class lectures.	13.2	13.2	55.3	18.4	0.0	.05
5. In-class activities reinforce learning the concepts in the videos.	21.1	63.2	13.2	2.6	0.0	.33*
6. In-class activities promote higher-order understanding of the videos.	16.2	51.4	32.4	0.0	0.0	.37*
7. I wish there were more video lectures.	8.1	45.9	40.5	5.4	0.0	.13*
8. I wish there were more in-class activities.	13.2	52.6	31.6	2.6	0.0	.25*
9. Overall, I enjoy the format of previewing videos and discussing in class.	26.3	47.4	15.8	10.5	0.0	.29*

Table 2 (continued)

Practice						
10. I usually watch videos before attending class.	15.8	44.7	23.7	10.5	5.3	.60***
11. I usually take notes when I view videos.	31.6	63.2	5.3	0.0	0.0	.36**
12. I usually scroll back to watch an earlier portion of the video.	44.7	47.4	7.9	0.0	0.0	.31*
13. I make meaningful contributions to class discussion after video viewing.	47.4	47.4	2.6	2.6	0.0	-.02*
14. I usually actively participate in group discussion.	8.1	35.1	48.6	8.1	0.0	.32*

Note. SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree.

Items 2, 3, and 4 asked the students to compare video lectures with the traditional methods of content delivery—textbook and live lecturing. Over 84% agreed or strongly agreed that they understood the concepts better by viewing videos than by reading textbook chapters. However, when asked to compare video lectures with live lectures, only 24% of the respondents agreed that video viewing helped them understand better than live lectures; only 26% agreed that video viewing was more interesting than live lectures. A noticeable proportion of the respondents (16% and 18%) disagreed with the above two statements.

With respect to the second dimension of the questionnaire, that is, students' practices of flipped learning, about 61% of the respondents agreed that they usually watched videos before attending class and 25% were neutral to this question. When asked about the frequency of previewing a video, 26% of the respondents ticked once, 65.8% twice, and 7.9% thrice. The majority of the respondents (95%) scrolled back to replay the earlier portion of the video. About 92% took notes. With respect to in-class activities, 95% of the respondents reported that they made meaningful contributions to the class discussion after watching the video. However, only 66% reported they usually actively participated in group activities.

Students' open-ended comments are presented in Table 3. Open coding was applied to categorize their comments. Five categories of responses to the most favorite parts of the course emerged through close reading of the responses: 1) collaborative activities in class, as discussion with classmates was useful in enhancing comprehension, identifying misconceptions, clarifying concepts, confirming accurate comprehension, and promoting further thinking; 2) video lectures, as videos facilitated good preparation for class activities, helped grasp difficult ideas quickly, and increased learning outcomes; 3) interactivity in class, as interacting with classmates enabled them to learn from the more capable and knowledgeable others, experience multiple perspectives, learn to settle on a mutually agreeable solution, and learn to find a solution; 4) self-paced learning, as videos allowed for repeated viewing, pausing to check for understanding, taking notes at one's own pace, and restudying the material after class discussion; and 5) good course organization, which made it easier to grasp the key concepts.

Table 3

Categories of Responses for the Three Open-ended Questions

Categories	Subcategories	Sources
	Most Favorite	
Collaborative activities in class	Enhance comprehension	S8, S11, S19, S23, S33, S34, S36. S37
	Identify misconceptions	S7, S9, S14, S28, S35, S24
	Clarify concepts	S2, S6, S15
	Confirm accurate comprehension	S1, S22
	Promote further thinking	S27
Video lectures	Facilitate good preparation for class activities	S8, S9, S12, S13, S15, S19, S22, S26, S27, S28, S32
	Enable quick understanding	S1, S2, S18, S31
	Increase learning outcomes	S17
Interactivity in class	Learn from the more capable and knowledgeable others	S1, S2, S33, S35
	Experience multiple perspectives	S6, S35
	Learn to settle on a mutually agreeable solution	S21
	Learn to find a solution	S14
Self-paced learning	View the videos repeatedly	S3, S11, S20, S25, S29
	Pause to check for understanding	S20
	Take notes at one's own pace	S20, S30
	Restudy after class discussion	S10, S29
Good course organization	Make it easier to grasp the key concepts	S18, S31

Table 3 (continued)

	Least Favorite	
Video lectures	Hard to understand	S1, S10, S12, S13, S22, S24, S26, S33, S34, S37
	No one immediately available for questioning	S6, S14
Students' lack of preparation for class activities	Not every student prepared for class discussion	S15, S20, S28
Video length	Too long.	S25, S30
	Too short.	S27
	Suggestions for Course Improvement	
Video captioning	Add captioning	S20, S23, S26, S27, S34, S37, S38
Explanation for video content	Allow more time for questioning about video content in class	S1, S14, S22, S30, S33

There were four categories of responses to the least favorite parts of the course: 1) difficult video lectures, as the video lectures were sometimes hard to understand and no one was immediately available for questioning; 2) students' lack of preparation for class activities. As noted by one student (S15), "Sometimes the group members I was assigned to work with did not watch the video first, which made the discussion difficult"; 3) inadequate video length: two students indicated that the videos were too long and one indicated the videos should be longer in order to include more details.

With regard to course suggestions, there were two major categories: 1) video captioning. Seven students indicated that adding captions would help them understand the video lectures better; 2) further explanation for video content. Five students requested more time to ask questions about video content in class.

Student Performance

To understand whether the flipped model of learning impaired the acquisition of basic course content, independent sample *t*-tests were used to compare the exam scores between the flipped and the live-lecture cohorts. The differences between the two cohorts did not reach significance in any of the exams (all *p*s > .05). See Figure 2 for student performances across the four exams over the two semesters. Please note that comparing performances across exams within a cohort was not suitable as the four exams did not cover the same content knowledge.

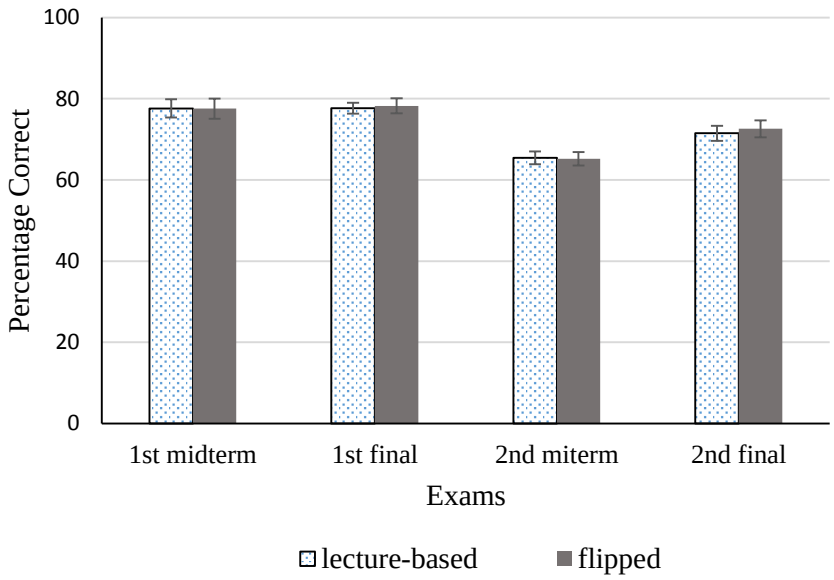

Figure 2. Exam scores of the flipped and the live-lecture cohorts. Error bars show standard errors

To explore whether the student's perceptions about flipped learning was related to their exam performance, students' responses to the questionnaire items were correlated with the exam scores at the end of the second semester. The exam scores were correlated with two perception items, item 5 ($r = .33$, $p < .05$) and item 6 ($r = .37$, $p < .05$). See Table 2 for the correlations between the perception items and the

exam scores. In addition, the exam scores were correlated with two practice items, item 10 ($r = .60$, $p < .001$) and item 11 ($r = .36$, $p < .05$). Practice items 12 and 14 were marginally correlated with exam scores ($r = .31$, $p = .056$ for item 3; $r = .32$. $p = .054$ for item 5). See Table 2 for the practice items and the correlations. Finally, the exam scores were correlated with the number of hours the respondents ticked for video viewing per week ($r = .40$, $p < .05$). Regression analyses were not conducted as the sample size of the current study was smaller than the minimum sample size required for a stable bivariate regression of a medium-size effect (Green, 1991).

DISCUSSION

Does flipped learning add value to a humanities course which has already built interactivity into the lectures? The answer was positive according to the results of this study. The results suggest that with careful design, the flipped learning model can be successfully implemented in a humanities course for EFL learners. It is important to note that the results of the study should be interpreted in light of the course design and the students' perception about their experience in flipped learning. The course was partially flipped. The students in the study experienced two modes of learning: flipped and interactive live lectures in the same course. They were thus able to evaluate their experience about flipped learning against their experience of live lectures of the same course. For the flipped units, class time was used for higher-order activities. Memorization and understanding of basic course content had to be achieved by students viewing videos alone at home, rather than by constructing understanding together with the instructor in class. Does the flipped format of learning impair their course performance? The answer was negative. The students in the flipped cohort did not perform worse in exams than students of the previous year. It appeared that when given more responsibility for and more control over their own learning, students of a humanities course experiencing flipped learning could achieve at least the same level of basic understanding of the course content as students experiencing the conventional format of learning, where the instructor and the students constructed meanings and made sense of the disciplinary content interactively. Nevertheless, the non-significant differences in the exam scores between the two cohorts can at best suggest that the flipped model

is not detrimental to the mastery of the basic concepts, but cannot lend support to the value of flipped learning in a humanities course.

If the flipped model does not improve students' exam performance, then what is the value of adding it to a humanities course, which is already constructive and interactive? The value appears to lie in the students' awareness and appreciation of the opportunities to collaboratively construct more elaborate conceptualizations in class and to be engaged in more higher-order learning activities than they would when learning in a conventional format. Rarely affordable in a conventional format, these learning opportunities were highly valued by the students in the present study. Over 70% of the students enjoyed previewing videos and discussing in class. Many described their favorite aspects of the course with terms characteristic of critical thinking. Most importantly, these opportunities for higher-order learning activities were not at the expense of the mastery of the basic concepts. The details about how the students perceived their experience in the flipped learning model of learning are discussed further in the following sections.

Student Perceptions and Practices

The positive views of flipped learning are attributable to how the flipped units were designed for learning. In this study, it was the output that determined the input. The desired learning outcomes for in-class activities determined the video content for learning. This design process created a close alignment of the in-class activities and the video lectures. The close alignment was crucial as over 80% of the respondents perceived that viewing video lectures was essential to success in class activities and that in-class activities reinforced the basic concepts acquired from the videos. The immediate awareness of the role of video lectures in flipped learning by the students appeared to be the major factor motivating them to invest time on videos outside of the class. Students prepared because they knew their preparation was useful.

Another positive comment was about the quality of the video lectures. The majority of the students perceived that the videos helped them understand the course content. Quality video is essential to flipped learning. Yet quality video does not refer to videos of high resolution or made in a professional studio. The videos in the current study have neither of those features. Then what motivated the students to watch the videos before class? One is that the video lecture was customized for

in-class activities and made by the instructor. Second is that the video was short. Given that the videos were customized for in-class activities, viewing them outside class was thus useful, rewarding and worth the time invested on the part of the students. It is worth mentioning that there are already many linguistics lectures made by others available online. These others-made lectures, though conveniently and freely accessible online, might not be useful for actual practice. They usually contain information not tailored to the in-class activities designed by the instructor and thus are not time-effective for student learning. Although the videos made by others can reduce the workload of the instructors who are interested in migrating from live lectures to a flipped classroom, solely relying on videos already made by others may lead the students to doubt the instructor and undermine the emotional bond between the instructor and the students.

Another factor that prevented students from opting out was perhaps the length of the video. The video lectures were condensed and made short (11 minutes on average). As the amount of content which usually took 50 minutes in a live lecture to cover was condensed into a short video, the majority of the students (over 90%) found that they had to scroll back, watch the videos multiple times, and take notes while viewing. Even though they needed repetitive viewing to master the concepts, many students enjoyed self-paced learning by videos in the current study. They felt that videos allowed repeated viewing, pausing to check for understanding, taking notes at one's own pace, and restudying the material after class discussions. All these processes took time. Long engagement seemed possible only with short, customized videos. Given that the flipped cohort did not show lower exam scores than the live-lecture cohort, it appears that self-directed learning from a condensed, short video, when properly designed, is possible in a humanities course and can be at least as effective as learning from a 50-min live-lecture format.

Some students encountered difficulties in video comprehension. The major suggestion the EFL learners made for flipped learning was adding captioning or onscreen keywords to videos. For students who learn English for a general purpose, full captioning is beneficial in promoting vocabulary learning and comprehension of the aural input (Garza, 1991; Winke, Gass, & Sydorenko, 2010). However, it is not yet clear how far full captioning facilitates mastery of academic concepts. When the video content is unfamiliar, adding full captions can split viewers' attention

between two visual input channels (captions and images), overloading visual working memory and hampering processes in either of the channels (Mayer & Moreno, 1998). The split-source information can be detrimental to information integration and result in less information intake, especially among learners whose L1 is distant from the target language (Winke, Gass, & Sydorenko, 2013). Before further research confirms the benefits of captioning for EFL learners in mastering academic content, one may take a midway approach, providing captioning for keywords only (Montero Perez, Peters, & Desmet, 2015).

The most interesting finding is perhaps how the students described their favorite part of the course. In the present study, class activities were geared to challenging tasks that required higher-order thinking and collaborative work for solving linguistics problems in a real-world context. Many students agreed that in-class activities promoted higher-order understanding of the video lectures. None disagreed. The most favorite aspect of flipped learning, according to students' comments, was 'tao-lun' (discussion) in class. The collaborative work helped 'clarify concepts,' 'confirm accurate comprehension,' 'identify misconception,' 'enhance comprehension,' and 'promote further thinking.' The students appreciated the opportunities to 'learn from the more capable and knowledgeable others,' 'to experience multiple perspectives,' and to 'learn to settle on a mutually agreeable solution.' Though not using the term 'higher-order thinking' or 'critical thinking' to describe their experience, the students made comments in line with the key concepts of higher-order critical thinking skills, such as establishment of a clear perspective on the issue, recognition of alternative perspectives, identification and evaluation of evidence, and assessment of implications and potential conclusion (Condon & Kelly-Riley, 2004; Facione, 1990). It should be noted that these students were not explicitly taught to think critically or prompted in any way to reflect on their learning experience in terms of critical thinking. Their spontaneous comments are actually strong and unbiased indicators of how they perceived their learning for the flipped units of the course. The flipped model appears to awaken and cultivate critical-thinking attitudes in students and provide a foundation for them to exercise the skills derived from those attitudes.

Despite positive perceptions, students had some reservations about completely embracing the model when asked to compare video lectures with the more traditional ways of content transmission. They preferred

video lectures to textbook chapters, but they did not favor video lectures over live lectures. It is understandable why the students didn't favor reading textbook chapters. Traditionally students of humanities are asked to prepare for the class by reading textbook chapters or other materials. In reality, few read them ahead of time or read them at all (Berry, Cook, Hill, & Stevens, 2010; Clump, Bauer, & Bradley, 2004). Textbook chapters are written for general academic readers, without considering the knowledge and the language backgrounds of EFL learners. EFL learners might find it hard to keep on the same page with the unknown textbook writer. In contrast, the video lectures in the present study were constructed by the instructor. Tailoring to the learning needs of the students, plus the synchrony of multi-modality input in the videos (the visual images, the audio, and the text flow), seemed to have made the video content more accessible and worth pursuing than textbook chapters.

The picture is different when the video lectures were compared with live lectures. A significant portion of the students did not endorse having more video lectures than live class lectures. Most students indicated neutrality or disagreement when asked about whether videos were more interesting or helped them understand better than live class lectures. These findings partially echo a recent finding that students are less interested in video lectures than live lectures in an introductory psychology course (Varao-Sousa & Kingstone, 2015). Students' reservation of replacing live lectures with a flipped model of learning may reflect the specific nature of how content knowledge is acquired in a humanities course. In live lectures, professors and students of humanities explore ideas and work together to make sense of the content knowledge. The results challenge complete embracement of the model of flipped learning in humanities courses. Having a professor socially present and lecturing interactively has its value for students to learn with trustworthy expertise. The flipped model has its advantage in repurposing class time for higher-order learning. How to balance the stronger elements of each for courses of humanities and social science needs to be carefully examined in future studies.

Student Performance

In contrast to the general findings from STEM disciplines, the EFL learners did not show higher exam performance than those in the

live-lecture cohort. The differences may be attributable to the nature of in-class activities across disciplines. In-class activities in flipped STEM courses are generally devoted to homework problems or textbook exercises, typically aligned with exam questions. However, the in-class activities in the present study were devoted to analyzing and evaluating linguistic phenomena in broader real-world contexts rather than practicing and overlearning the course content. For example, the students discussed whether the newly developed term 'little fresh flesh' fostered sexism towards men. Students explored and defended perspectives rather than mastered factual knowledge. In fact, the flipped cohort received 28% less class time on learning factual knowledge in class than the live-lecture cohort. The finding that the two cohorts did not differ in exam performance indicates that devoting class time to higher-order thinking activities in a flipped class does not necessarily sacrifice the mastery of essential course content.

The results of correlational analyses provide some insights about the profiles of successful EFL learners in a flipped class. The students who gained higher scores for the course felt that in-class activities not only enhanced the mastery of the concepts in the videos but also promoted higher-order understanding. They were those who reported more hours of video watching per week. They took notes while viewing videos and scrolled back to ensure understanding. These findings suggest that self-regulated learning (management and control of their effort), which is crucial to academic achievement in regular classrooms (Pintrich & De Groot, 1990), also plays an important and perhaps even more important role in the flipped learning of English academic content.

CONCLUSION

The present study contributes to the expansion of the existing literature in flipped learning to a humanities course and to EFL learners. For EFL learners, the value of adding a flipped learning component to a humanities course is not necessarily reflected in the increase of exam scores but rather in the flexibility of learning and the opportunities for higher-order thinking in class. Such learning experiences are not affordable in the conventional format of live lectures. The conventional format of live lectures, no matter how interactive and constructive they are, essentially involves teacher-led interpreting, exemplifying, classifying, and comparing factual and conceptual knowledge. The

learning processes are still at the lower levels (memorization and understanding) of Bloom's taxonomy (1984). Even in the few occasions when class time is allowed to implement higher-order activities, students are usually not ready to make meaningful contributions to the topic they just learned in class. The flipped learning model makes the implementation of higher-order learning activities possible. Previewing video lectures empowers EFL learners with the necessary concepts to participate in activities that they perceive fruitful to context-rich problem-solving. The EFL learners of linguistics describe their favorite parts of in-class activities, using terms that constitute key concepts of higher-order critical thinking skills. For EFL learners, learning is differentiated by prerecorded lectures as videos allow for a pace of learning that is most effective for students with varying proficiency levels of the target language. Nevertheless, flipped learning is better conceptualized as a complement (as opposed to a substitute) to the conventional model of learning in humanities courses. In spite of the positive views on flipped learning, students show ambivalent attitudes toward statements that place higher values on video lectures than live class lectures. These ambivalent attitudes challenge complete embracement of the flipped models of learning in the disciplines of the humanities and social sciences. Further investigations are called for to document the benefits (and the pitfalls) of flipped learning in disciplines which have already blended lecture and discussion in their delivery of learning materials.

The present study has some limitations. First, because the study was a case study, the results may not be generalized to other disciplines in the humanities and social sciences, which involve multiple paradigms of teaching and researching (Biglan, 1973). Further studies using a more rigorous control with randomized treatment are needed to fully estimate the efficacy of applying the flipped model of learning to students of the humanities and social sciences and to students who study academic material in another language. Second, simply evaluating the effectiveness of flipped learning in a single course may only yield limited views about how students respond to this particular mode of learning. It is not clear how students will respond when time and space are flipped from the traditional scheme of learning for all their academic courses. The benefit of flipped learning, if any, should be evaluated not only from a domain-specific perspective but also by taking into account the amount of out-of-class work that the student has to complete.

REFERENCES

Abeysekera, L., & Dawson, P. (2015). Motivation and cognitive load in the flipped classroom: definition, rationale and a call for research. *Higher Education Research & Development*, *34*, 1-14.

Becher, T. (1987). The disciplinary shaping of the profession. In B. R. Clark (Ed.), *The academic profession* (pp. 271-303). Berkeley, CA: University of California Press.

Berrett, D. (2012). How 'flipping' the classroom can improve the traditional lecture. *The Education Digest*, *78*(1), 36.

Berry, T., Cook, L., Hill, N., & Stevens, K. (2010). An exploratory analysis of textbook usage and study habits: Misperceptions and barriers to success. *College Teaching*, *59*, 31-39.

Biglan, A. (1973). Relationships between subject matter characteristics and the structure and output of university departments. *Journal of Applied Psychology*, *57*, 204-213.

Bloom, B. S. (1984). *Taxonomy of educational objectives*. Boston, MA: Allyn and Bacon.

Chen, S. C., Yang, S. J., & Hsiao, C. C. (2015). Exploring student perceptions, learning outcome and gender differences in a flipped mathematics course. *British Journal of Educational Technology*, *47*, 1096-1112.

Choi, J., & Lee, Y. (2015). To what extent does 'flipping' make lessons effective in a multimedia production class? *Innovations in Education and Teaching International*, DOI: 10.1080/14703297.2015.1123105

Clump, M., Bauer, H., & Bradley, C. (2004). The extent to which psychology students read textbooks: A multiple class analysis of reading across the psychology curriculum. *Journal of Instructional Psychology*, *31*, 227-232.

Condon, W., & Kelly-Riley, D. (2004). Assessing and teaching what we value: The relationship between college-level writing and critical thinking abilities. *Assessing Writing*, *9*, 56-75.

D'Mello, S., Lehman, B., Pekrun, R., & Graesser, A. (2014). Confusion can be beneficial for learning. *Learning and Instruction*, *29*, 153-170.

Deslauriers, L., Schelew, E., & Wieman, C. (2011). Improved learning in a large-enrollment physics class. *Science*, *332*, 862-864.

Dobao, A. F. (2014). Vocabulary learning in collaborative tasks: A comparison of pair and small group work. *Language Teaching Research*, *18*, 497-520.

Facione, P. A. (1990). *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction*. Millbrae, CA: The California Academic Press.

Facione, P. A. (2000). The disposition toward critical thinking: Its character, measurement, and relationship to critical thinking skill. *Informal Logic*, *20*, 61-84.

Figlio, D., Rush, M., & Yin, L. (2013). Is it live or is it internet? Experimental estimates of the effects of online instruction on student learning. *Journal of Labor Economics*, *31*, 763-784.

Findlay-Thompson, S., & Mombourquette, P. (2014). Evaluation of a flipped classroom in an undergraduate business course. *Business Education & Accreditation*, *6*(1), 63-71.

Forsey, M., Low, M., & Glance, D. (2013). Flipping the sociology classroom: Towards a practice of online pedagogy. *Journal of Sociology*, *49*, 471-485.

Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking, cognitive presence, and computer conferencing in distance education. *American Journal of Distance Education*, *15*, 7-23.

Garza, T. J. (1991). Evaluating the use of captioned video materials in advanced foreign language learning. *Foreign Language Annals*, *24*, 239-258.

González-Gómez, D., Jeong, J. S., & Rodríguez, D. A. (2016). Performance and perception in the flipped learning model: An initial approach to evaluate the effectiveness of a new teaching methodology in a general science classroom. *Journal of Science Education and Technology*, *25*, 450-459.

Green, S. B. (1991). How many subjects does it take to do a regression analysis? *Multivariate Behavioral Research*, *26*, 499-510.

Ho, K. K. (1982). The effect of language of instruction on physics achievement. *Journal of Research in Science Teaching*, *19*, 761-767.

Höffler, T. N., & Leutner, D. (2007). Instructional animation versus static pictures: A meta-analysis. *Learning and instruction*, *17*, 722-738.

Hung, H. T. (2015). Flipping the classroom for English language learners to foster active learning. *Computer Assisted Language Learning*, *28*, 81-96.

Hung, H. T. (2017). Design-based research: redesign of an English language course using a flipped classroom approach. *TESOL Quarterly*, *51*, 180-192.

Kang, N. (2015). The comparison between regular and flipped classrooms for EFL Korean adult learners. *Multimedia-Assisted Language Learning*, *18*(3), 41-72.

Liu, M., & Jackson, J. (2008). An exploration of Chinese EFL learners' unwillingness to communicate and foreign language anxiety. *The Modern Language Journal*, *92*, 71-86.

Love, B., Hodge, A., Grandgenett, N., & Swift, A. W. (2014). Student learning and perceptions in a flipped linear algebra course. *International Journal of Mathematical Education in Science and Technology*, *45*, 317-324.

Manel, D. A. (2010). The limitation of e-learning and the psychology of learners: The case of a humanity course. *International Journal of the Humanities*, *8*(5), 259-268.

Mayer, R. E., & Moreno, R. (1998). A split-attention effect in multimedia learning: Evidence for dual processing systems in working memory. *Journal of Educational Psychology*, *90*, 312-320.

McTighe, J., & Lyman, F. T. (1988). Cueing thinking in the classroom: The promise of theory-embedded tools. *Educational Leadership*, *45*(7), 18-24.

Montero Perez, M., Peters, E., & Desmet, P. (2015). Enhancing vocabulary learning through captioned video: An eye-tracking study. *The Modern Language Journal*, *99*, 308-328.

Neumann, R., Parry, S., & Becher, T. (2002). Teaching and learning in their disciplinary contexts: A conceptual analysis. *Studies in Higher Education*, *27*, 405-417.

Niu, L., Behar-Horenstein, L. S., & Garvan, C. W. (2013). Do instructional interventions influence college students' critical thinking skills? A meta-analysis. *Educational Research Review*, *9*, 114-128.

Norton, L., Richardson, T. E., Hartley, J., Newstead, S., & Mayes, J. (2005). Teachers'

beliefs and intentions concerning teaching in higher education. *Higher Education*, *50*, 537-571.

O'Flaherty, J., & Phillips, C. (2015). The use of flipped classrooms in higher education: A scoping review. *The Internet and Higher Education*, *25*, 85-95.

Olitsky, N. H., & Cosgrove, S. B. (2016). The better blend? Flipping the principles of microeconomics classroom. *International Review of Economics Education*, *21*, 1-11.

Peng, J. E., & Woodrow, L. (2010). Willingness to communicate in English: A model in the Chinese EFL classroom context. *Language Learning*, *60*, 834-876.

Pierce, R., & Fox, J. (2012). Vodcasts and active-learning exercises in a "flipped classroom" model of a renal pharmacotherapy module. *American Journal of Pharmaceutical Education*, *76*(10), 1-5.

Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, *82*, 33-40.

Richards, J. C. (2013). Curriculum approaches in language teaching: Forward, central, and backward design. *RELC Journal*, *44*(1), 5-33.

Roach, T. (2014). Student perceptions toward flipped learning: New methods to increase interaction and active learning in economics. *International Review of Economics Education*, *17*, 74-84.

Roehl, A., Reddy, S. L., & Shannon, G. J. (2013). The flipped classroom: An opportunity to engage millennial students through active learning. *Journal of Family and Consumer Sciences*, *105*(2), 44-49.

Shyu, H. Y., & Hsiang, C. W. (2016). The impacts of flipped-classroom integrated into computer course on critical thinking for 6th graders. *Curriculum & Instruction Quarterly*, *19*, 23-60.

Tatzl, D., & Messnarz, B. (2013). Testing foreign language impact on engineering students' scientific problem-solving performance. *European Journal of Engineering Education*, *38*, 620-630.

Tomlinson, C. A. (2003). *Fulfilling the promise of the differentiated classroom*. Alexandria, VA: Association for Supervision & Curriculum Development.

VanLehn, K., Siler, S., Murray, C., Yamauchi, T., & Baggett, W. (2003). Why do only some events cause learning during human tutoring? *Cognition and Instruction*, *21*, 209-249.

Varao-Sousa, T. L., & Kingstone, A. (2015). Memory for lectures: How lecture format impacts the learning experience. *PLoS ONE*, *10*, 1-11.

Winke, P., Gass, S., & Sydorenko, T. (2010). The effects of captioning videos used for foreign language listening activities. *Language Learning & Technology*, *14*, 65-86.

Winke, P., Gass, S., & Sydorenko, T. (2013). Factors influencing the use of captions by foreign language learners: An eye-tracking study. *The Modern Language Journal*, *97*, 254-275.

Yeh, C. C. (2012). Instructors' perspectives on English-medium instruction in Taiwanese universities. *Curriculum Instruction Quarterly*, *16*, 209-232.

Zainuddin, Z., & Attaran, M. (2016). Malaysian students' perceptions of flipped classroom: A case study. *Innovations in Education and Teaching International*, *53*, 660-670.

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翻轉教學在大學人文專業課程之價值：學生觀感與學習表現

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一般大學人文專業課程多已採互動以及建構式的教學，翻轉教學是否能對學生的學習產生新的價值仍有待檢視。本文探究以英語學習人文專業課程的大學生，經過兩學期翻轉教學融入語言學概論的學習表現以及看法。課程採部分翻轉模式：於翻轉單元，學生須於課前看教師自製的學習影片，課堂上應用影片習得的知識，評析真實世界之相關問題；於其它單元，學生經驗一般課堂聽講的學習模式。學生問卷顯示翻轉模式有助於高層思考能力之發展以及差異化之學習。學生喜歡透過影片學習甚於教科書，但與課堂講述相比，並不偏愛影片學習。關聯分析顯示：學生成績表現與其是否體認影片與課堂活動的連結性以及是否投入時間預看影片有關。與前一年以課堂聽講方式學習同樣課程的學生相比，參與翻轉的學生在課堂上雖然少了28%的時間學習基本學科內容，但考試成績並未更差。在大學人文專業課程如何平衡翻轉模式與課堂講述應有更進一步的研究。

關鍵詞：翻轉教學、人文專業課程、學生看法