

An Empirical Study of a SPOC Embedded Flipped Classroom Model for College Intercultural Communication Course: Perceptions of Students

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Abstract

Higher education in China has experienced a significant transformation from an elite educational system to a stage of massification since the first decade of the 21st century. A Small Private Online Course (SPOC) embedded flipped classroom is called for to accelerate the innovation of teaching and learning approaches particularly for English-major courses such as Intercultural Communication. Compared to the traditional knowledge-transmission teaching, flipped classroom approaches engage a variety of pre- and post-class work and in-class activities. This raises questions about the real status of the SPOC embedded flipped classroom model in Chinese higher education and whether it is perceived as important and effective. This study aims to explore the feedback of a four-month experiment using a flipped classroom approach which involved 153 undergraduate students at Wuhan University of Technology. Adopting an online-based questionnaire which consisted of 40 multiple-choice and open-ended questions, the present study investigated the attitudes of students toward the learning of English language and culture through the SPOC embedded flipped classroom model. Major findings show the positive attitudes of students toward the use of the proposed model in English-major courses; it contributes to the development of students' autonomous, active, and collaborative learning skills. However, some issues are addressed in relation to the time allocation of online learning and in-class activities and students' engagement in the online community. Several pedagogical suggestions are proposed such as the provision of an induction program.

Keywords: students' perspectives, flipped classroom, higher education

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Introduction

Higher education in Mainland China has experienced a significant transformation away from an elite educational system to one in a stage of massification, since the first decade of the 21st century. In 2007, China's Department of Higher Education launched the College English Curriculum Requirements, promoting "a computer-assisted and classroom-based teaching model" (p. 8). The National Foreign Languages Teaching Advisory Board also developed the *Guidelines on College English Teaching*, noting that computer and information technology should be widely applied to college English education as they not only facilitate the reform of teaching approaches and practices but also provide a large range of innovative learning resources to students (Ministry of Education, 2015).

While the emergence of Massive Open Online Courses (MOOC) has significantly influenced higher education in China on the merits of being accessible, affordable, sustainable, flexible, and collaborative, blended learning approaches provide potential solutions to the well-known problem of high dropout rates involved in MOOCs (Cheng, Liu, Sun, Liu, & Yang, 2017). One blended learning approach, the Small Private Open Course (SPOC), is one alternative to enhance and innovate on-campus curricular content through the platforms, technologies, and patterns used in MOOCs (Zhang, 2017). According to Fox (2013), the SPOC supplements the traditional classroom experience with free online learning materials delivered through MOOCs. In a sense, the SPOC combines the features of both face-to-face instruction and MOOCs, and extends the existing courses in higher education to online education.

However, an interesting issue raised is how to distribute and arrange face-to-face and online instruction for a SPOC-embedded English as a foreign language (EFL) course in higher education. It has been widely accepted that second learning (L2) cannot occur without some form of input. In foreign language (FL) settings such as those that prevail in Mainland China, most of L2 English learners have little opportunities to access the target language through natural exposure. Moreover, even in the face-to-face classroom, the majority of class time is used ineffectively by EFL teachers who focus on accounting for concepts through lecturing while students merely sit quietly and passively listen (Zappe, Leicht, Messner, Litzinger, & Lee, 2009; Littlewood, 1999). As a result, students may not be able to receive sufficient input and put those target items into practice due to the limited time of an EFL class.

A flipped classroom approach has the potential to address the aforementioned issue. Compared to traditional knowledge-transmission teaching, the flipped classroom approach removes face-to-face lectures from class time; instead, class presentations transform into home activities while homework and projects shift to in-class tasks (Abeysekera & Dawson, 2015; Sohrabi & Iraj, 2016). Since the learning process inverts in a flipped classroom, students have more access to using English inside and outside the classroom (Bergmann & Sams, 2012). Accordingly, students watch pre-recorded instructional videos via online platforms at home and engage in homework and activities collaboratively with their classmates during the class.

Despite the recent attention given to the flipped classroom approach (Akçayır & Akçayır, 2018; Bishop & Verleger, 2013; Butt, 2014; Jaster, 2013; Lee, Lim, & Kim, 2017; Lee & Wallace, 2018; Shih & Tsai, 2017; Zainuddin & Attaran, 2016), there is

limited empirical evidence regarding the status of the SPOC-embedded flipped classroom model in Chinese higher education and whether it is perceived by students as important and effective, particularly in EFL classrooms. The established studies focus on the design and principles of flipped classrooms in Mainland China (Jiang & Hu, 2018; Luo, 2017; Wang, 2017; Zhang, 2017; Zhang & Tao, 2017; Wang, Chen, & Zhang, 2016). Therefore, this study investigates undergraduate students' perspectives of the SPOC embedded flipped learning model in an EFL course at a Chinese public university.

Research Methods

Participants

This study involved a compulsory EFL course for undergraduate English majors, "*Society and Culture of Britain and America*," taught collaboratively by three lecturers affiliated with the same department in the fall semester of 2018 at a public university in Wuhan, Hubei. One hundred fifty students enrolled in this course with six classes, and each lecturer instructed two classes. There were 25 students in each class and 122 students voluntarily participated in this study by completing an online questionnaire at the end of the semester. The majority of the participants were freshmen (94.26%), while the remaining consisted of six sophomores (4.92%) and one junior (0.82%). Before attending this course, only 13.93% had experience in online learning, while more than one-fifth (21.31%) reported having no idea about this concept. The remaining participants (64.76%) demonstrated a limited understanding of online learning.

The SPOC Embedded Flipped Classroom

The course lasted four months, from September to December 2018. Each class ran twice a week for 90 minutes. The three teachers had a regular meeting every Friday to determine the topics of discussion, collaborative tasks, and the face-to-face instruction process for the next session. All teaching materials were developed based on the course outline and curriculum requirements and subsequently produced into a SPOC on the Chinese Universities MOOC.

The teachers implemented the flipped classrooms by requiring students to complete self-paced online learning before class, including watching instructional videos, listening to recorded audios, reading passages, and making use of online learning resources via the SPOC platform. Additionally, students were required to complete an online quiz each week so the instructors could evaluate the students' work and progress. The students received the results of the quizzes immediately via the online platform.

During the face-to-face sessions, the instructors facilitated collaborative learning by leading students in a variety of in-class tasks and activities. Students were required to bring their own smart devices, such as smartphones, tablets, or laptops, to complete homework via the SPOC platform. Each homework assignment consisted of ten multiple-choice questions and aligned to individual lessons. The results of homework were released instantly through the online learning system. The instructors also provided feedback to address the unclear issues proposed by students. Students also

participated in group discussions that covered a range of pre-determined topics. The teachers provided a summary of the group discussion at the end of every session. Finally, students were told to share their questions and concerns concerning pre-class online learning, while other classmates were encouraged to provide corresponding solutions, followed by the teachers' comments.

Instrument and Procedures

The researcher utilized an online survey to investigate students' attitudes toward the proposed approach and its perceived benefits. The questionnaire contained ten multiple-choice questions (see Tables 1-3) and one open-ended question. The former items assessed students' attitudes toward the SPOC and flipped classroom model, active and autonomous learning modes, and collaborative learning mode; the latter item collected information about students' opinions of benefits or shortcomings of the flipped classroom structure. Cronbach alpha for the five Likert-type scale items was .72, which is an acceptable value for reliability. All items were in Chinese to avoid potential misunderstanding.

At the end of the final session, all participants used their own smart devices to complete the online questionnaire anonymously within 20 minutes. The participants received a consent form and instructions for completing the online survey in advance. The researcher and the course instructors did not enter the class while consenting students completed their questionnaires and were not allowed to access any survey data until after final grades were submitted.

The quantitative data from multiple-choice questions were analyzed through SPSSAU v16.0 Software. To obtain a picture of the students' perspectives that was more comprehensive, the researcher checked through the participants' responses to the open-ended question and marked the keywords concerning their likes, dislikes, and suggestions to identify specific topics. The similar patterns within the topics were then generalized according to the overall features of SPOC-embedded flipped classrooms; examples of content patterns include subtitles of the instructional videos, teaching content, homework, discussions, and peer interactions.

Results

Table 1 shows the results regarding the undergraduates' attitudes toward the SPOC and flipped classrooms through five survey items. First, 60.66% of the respondents agreed or strongly agreed that they liked the online learning mode and enjoyed interacting with the instructor through a flipped classroom; 33.61% were not sure. Second, 33.61% agreed or strongly agreed that they did not adapt themselves to the SPOC embedded flipped classroom very well, and over half of the informants (51.64%) held a neutral attitude. Only 14.75% showed a positive attitude about their adaptation to the proposed teaching approach. Third, over one-fifth of the respondents (22.13%) agreed or strongly agreed that they did not feel free while engaging with the SPOC embedded flipped classroom, while more than one third (33.61%) indicated the opposite perspective; the rest of the participants (44.26%) were not sure. Fourth, over two-fifths of the respondents (43.45%) agreed or strongly agreed that they preferred the traditional knowledge-transmission classroom than the SPOC-embedded flipped classroom, while less than one fifth (19.67%) held the opposite attitude; the remaining

students (36.89%) held a neutral position. Fifth, 38.52% agreed or strongly agreed that the SPOC embedded flipped classroom approach was more beneficial than the traditional classroom instruction, while only 8.2% opposed that; over half of the respondents (53.28%) showed a vague attitude.

Table 1: Attitudes toward SPOC and flipped classrooms

	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
I like online learning and interacting with the teacher	4.1%	56.56%	33.61%	3.28%	2.46%
I don't adapt myself to the new model very well	2.46%	31.15%	51.64%	13.93%	0.82%
I don't feel free while engaging with the new model	4.1%	18.03%	44.26%	31.97%	1.64%
I prefer traditional classrooms than flipped classrooms	9.02%	34.43%	36.89%	18.03%	1.64%
I reckon that the new model is more beneficial	0.82%	37.7%	53.28%	6.56%	1.64%

Table 2 reveals the findings about the students' attitudes toward active and autonomous learning mode. First, over two-fifths of the participants (40.99%) agreed or strongly agreed that they were able to arrange their online learning and manage their learning progress well, and approximately half of the respondents (49.18%) indicated an unsure position. Second, more than half (51.64%) agreed or strongly agreed that they had more available time to consider the relevant questions while studying the SPOC, and nearly two fifths (39.34%) were unsure about that. Last but not the least, 45.9% affirmed that the SPOC embedded flipped classroom model advanced their autonomous learning skills and enabled them to learn more actively, while almost the same amount of the respondents (45.08%) had a neutral attitude.

Table 2: Attitudes toward active and autonomous learning mode

	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
I can arrange online learning and manage learning progress	4.1%	36.89%	49.18%	7.38%	2.46%
I have more time to think through the questions	8.2%	43.44%	39.34%	7.38%	1.64%
It advances my autonomous and active learning skills	2.46%	43.44%	45.08%	8.2%	0.82%

As Table 3 indicates, the results of the undergraduates' attitudes regarding the collaborative learning mode are tabulated according to two survey items. First, nearly half of the informants (45.9%) showed agreement or strong agreement that they could interact better with other classmates and learn more from each other, while 43.44% held an unclear position. Second, over a half (53.28%) agreed or strongly agreed that their team spirit and cooperative skills were advanced via the SPOC embedded flipped classroom approach, and 36.07% were uncertain.

Table 3: Attitudes toward collaborative learning mode

	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
I can interact better with and learn more from classmates	0.82%	45.08%	43.44%	9.02%	1.64%
My teamwork spirit and cooperative skills are advanced	2.46%	50.82%	36.07%	9.84%	0.82%

The open-ended comments from the online survey varied considerably and it was difficult to identify consistencies. The categories and frequently mentioned keywords that appeared in the students' comments pertained to the "online" and "time" aspects of the course. The time allocation of online learning and face-to-face instruction appears to be the most conflicting issue for student respondents. Some students indicated that they favored online-based learning and recommended further implementation of SPOCs instead of traditional in-class lectures, as exemplified by two students' responses, which stated "Online learning is very interesting, and I can manage my study time. I suggest this course should be developed as 100% online instruction mode" (Student A) and "I learned a lot from an online course. Hope the teacher can increase the online lessons and upload more supplementary materials to the SPOC" (Student B).

However, responses to weaknesses of the proposed model suggested that some students preferred more traditional in-class sessions over online learning, such as "The time allocation for online learning seems a bit too much, which sometimes makes me stressed" (Student C), and "More units should be delivered by in-class sessions" (Student D).

Conclusion

This study reports on English-major undergraduates' perspectives on a SPOC embedded flipped classroom model at a public university in Mainland China. The results revealed that, on average, around half of students were positive about the use of the SPOC-embedded flipped classroom model in the current course, but the feedback from a few of survey items was somewhat mixed. First, concerning general attitudes toward SPOC and flipped classrooms, students consistently favored online learning and interacting with teachers; approximately two-fifths of the students believed the new teaching format was more beneficial than the previous approach. However, a majority of students did not clearly indicate that they fit the flipped classroom model and preferred it to traditional face-to-face instruction. Most of the students were open to this new attempt, but they were less satisfied with classroom structure than those in a traditional class were. This finding is relatively consistent with the result reported in Jaster (2013), who found that a majority of students enrolling in a first-year algebra course at an American college preferred a traditional lecture approach to a flipped classroom. A possible explanation for students' converse preference is that almost all the participants are first-year undergraduates and they may be underprepared for an immediate transition from a familiar instructional mode to an unfamiliar one. Those students graduated primarily from public high schools in Mainland China where traditional face-to-face lectures were employed exclusively. Thus, the lack of self-confidence might result in their conservative attitudes toward the SPOC and flipped classrooms.

In terms of active and autonomous learning mode, the students reported greater satisfaction with the flipped classroom structure. Approximately half of the students became positive toward their self-paced learning through the online platform and believed that the new model contributed to their autonomous and active learning skills and critical thinking. This result generally follows that of Zainuddin and Attaran (2016), who found that 78% of students favor the innovative learning mode of flipped approaches since it provides more time for them to perform the individual study and practice teaching contents outside the class. However, slightly more than half of the students did not believe or felt uncertain that they could manage their learning progress, which may result from the fact that most students still feel more comfortable about passively receiving knowledge from the instructor in a teacher-centered classroom; thus, they may not have not established strong motivation for self-driven learning. Moreover, a majority of the students had limited or no understanding of flipped learning, so they might not be familiar with how to conduct autonomous and online learning properly.

Regarding a collaborative learning mode, over half of the students were positive about their teamwork experiences and peer cooperation via the flipped classroom, while slightly less showed their confidence in peer learning and interaction. In another research study by Zainuddin and Attaran (2016), 67% of students claimed that flipped learning helped them develop a student-student rapport outside the class. The flipped classroom model is a student-centered pedagogical approach; thus, students have greater opportunities to communicate with their classmates using technology out of class and to participate actively in collaborative, hands-on tasks or activities during the sessions. However, the result also suggests that greater effort will be necessary to strengthen students' faiths and motivation in acquiring knowledge and skills through active helping and supporting their classmates.

The students' comments on the open-ended section draw our attention to a highlighted issue of flipped classrooms, namely, the time allocation of online learning and face-to-face sessions. Some students liked the ability to work at their own pace and time through the online platform, while others raised concerns that a higher workload from the online course caused them stress and seemed imbalanced when comparing online learning and face-to-face instruction. These concerns are similar to those previously discussed in the literature regarding criticisms of flipped learning (DeGrazia, Falconer, Nicodemus, & Medlin, 2012; Toto & Nguyen, 2009). The heterogeneity of students in class possibly causes that some students favor online learning while others dislike it. Their diverse levels of English proficiency and learning demands may determine their different preferences for instructional formats.

There are several suggestions that could potentially improve the effectiveness of the current flipped classroom model. First, an introductory program for SPOCs and flipped classrooms is necessary so that students can obtain additional guidance in developing their online, autonomous, and cooperative learning skills. Second, instructors need to check the discussion board of the SPOC platform more regularly and address individual questions posted by students more efficiently. Regular assistance from student tutors may be an addition to practicing teaching strategies. Third, a pre-course assessment may be helpful to have a better understanding of different levels of students' English proficiency. Finally, online learning materials

need to be divided into fundamental and advanced materials in line with students' learning readiness.

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