

Holistic Flipped Classroom Model in ELT – Exploring learner engagement and autonomy in an English Enhancement Course for Early Childhood Education Pre-service Teachers

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Abstract

Next generation of language learners need learner-centredness in higher education ELT courses. A Holistic Flipped Classroom model (HFC) has been proposed in this research for such ELT course design. The effectiveness of three key components of the model - an authentic or near-authentic language learning community, flipped teaching, project-based assessment – are examined in an interactive storytelling short course for Early Childhood Education pre-service teachers at a teacher's university in Hong Kong. A mixed research method of pre- and post-course surveys and interviews was used to measure students' preference for such a model and their perceived effectiveness of the model on their learning outcomes. Data collected from students' survey and interviews showed students' higher motivation in learning and overall improvement of confidence and story creation as well as moderate enhancement in learner autonomy. This paper shares the design of this holistic flipped classroom model and further recommendations on teacher training and language learning enhancement technology are made.

Keywords: Holistic flipped classroom, tertiary-level ESL/EFL teaching, learner autonomy, project-based assessment, technology-enhanced language learning, interactive storytelling

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Introduction

Higher Education is undergoing change facing the new demands of increasingly technology-savvy cohorts of students (O'Flaherty & Phillips, 2015). Born into a technology rich age and now studying at tertiary institutions, these learners showed disengagement from learning if they passively listen to lectures or taking notes with little reflection in class. Some educators are concerned that due to the frequent use of 'Rapid Communication Technology' such as Facebook, instant messaging, these learners may require instant gratification or may even be shallow in thinking (Carnival, 2006). However, researchers found that these 'digital natives' did show strong motivation to learn although they learn in different ways compared to the generations before (Barnes, Marateo & Ferris, 2007). Prensky (2007) claimed that what has changed is not 'students' attention capabilities' but rather 'their tolerance and needs' (p.2). Barnes, Marateo and Ferris (2007) argued that Net Geners could be more engaged if the learning environment encourages independence and autonomy.

Flipped classroom approach (FCA) is well-claimed to be conducive to the development of learner autonomy (Bakla, 2018; Bishop & Virleger, 2013; Fan, 2018; Hung, 2018; Lin & Hwang, 2018; Roehl, Reddy & Shannon, 2013). Also known as flipped learning or flipped teaching, this instructional model has been incrementally well-received in higher institutions worldwide to replace lecture-centred teaching in higher education. Originated in 2008 by Salman Khan, who recorded 4,400 instructional videos on K-12 topics such as math, science, history to cater for individually paced learning, this flipped classroom approach gained its momentum in primary schools in the United States since then. In 2012, when MOOC-based tertiary teaching platform Coursera was introduced to global learners, it also brought flipped classroom approach (FCA) to tertiary classroom worldwide (Limongelli, Lombardi & Marani, 2016). On the one hand, a typical flipped classroom design is similar to MOOC in that it involves 'flipping' traditional in-class lectures into pre-lecture videos and mastery checking quizzes that students can learn more comfortably at their own individual pace. On the other hand, the key advantage flipped teaching has over MOOC is that it also composes teacher/peer-face-to-face interaction and collaborative hands-on in-class activities, which could be crucial in maximizing active learning. Therefore, categorized by Staker and Horn (2012) as one rotation model of blended learning, flipped classroom provides a more active, engaged learning experience. In addition, recent researches also showed that FCA trained students higher order thinking (Hung, 2018; Angelini & Garcia-Carbonell, 2019), which are consistent with higher educational goal of whole person development. Beetham and Sharpe (2013) contended that instead of teacher-centred lecturing, higher education courses class time should be devoted to tasks that focus on knowledge application and work skill training, which entails the development of learners' problem solving skills, critical thinking skills, social interaction skills, creative thinking skills and ethical decision making, global perspectives, oral and written communication skills (Barrie, 2007; Biggs, 2011; Zhang, 2018). O'Flaherty & Phillips (2015) believe that an effective flipped classroom approach fosters these 21st century work skills, enhances students' ownership of learning, allows self-paced learning and frees up class time for robust discussion and associated problem solving).

The learner-centred nature of flipped classroom approach has made it popular in English language teaching (ELT). Turan and Akdag-Cimen (2019) in their systematic

review of 103 articles on flipped classroom in ELT suggested that FCA resulted not only in increased student engagement, but it also allows for diverse learning needs to be met. Since lecture contents are studied at home, class time is maximized for teachers' immediate individualized feedback on language and social/affective issues and peer interaction. Students are more engaged in communication through the target language in interactive activities. Some researchers even claim that students may have a higher chance of developing autonomy when they take the responsibility to learn the content of the course before coming to the classroom (Blin, 2004; Lee, 2017; Reynolds & Shih, 2019). Chen, Wang, Kinshuk and Chen (2014) proposed the concept of 'Holistic Flipped Classroom approach' (HFC). They argued that the F-L-I-P™ of 'Flexible Environments, Learning Culture, Intentional Content and Professional Educators' has its inadequacies. By adding 'Progressive Networking Activities, Engaging and Effective Learning Experiences, and Diversified and Seamless Learning Platforms', the authors have turned 'FLIP' into a more holistic 'FLIPPED' model. In their research, they have included online synchronous classroom, digital library, cloud and discussion forums and using physical classroom for summative test. Since their HFC model was for post-graduate level students in a computer science course, it is not readily reproducible in an English enhancement course. Therefore, this study attempts to identify the key elements of a holistic flipped classroom curriculum and to understand HFC's effect on learner engagement and its potential in developing learner autonomy.

Accordingly, three research questions will be explored in this study:

1. Which elements of holistic flipped classroom design enhance learner engagement?
2. Whether technology effectively supports students' learning in FCA environment?
3. Whether students are able to develop learner autonomy through flipped learning?

Components of Holistic Flipped Classroom model and Technology

A holistic flipped classroom model should include an authentic or near-authentic language learning community, flipped teaching, and project-based assessment. To make the model easily accessible to learners, technologies aligned with these four key elements should be incorporated.

First, an authentic or near-authentic language learning environment. English language learning has been form-focused and communication-based, which means the human elements, i.e. teacher and peers, are crucial elements in a learners' success in language learning (Dörnyei, 2009). As is evident in L1 learning, learners acquire listening and speaking skills through emersion in their mother tongue. So does the acquisition of L2. Even though classroom language environment may not be authentic as in real life, teachers who are native English speakers or near-native English teaching professionals can produce authentic conversation with their learners. To further enhance the language learning environment, teachers may also incorporate multimedia resources in authentic English or invite overseas partners into the course. Ideally, to make language learning more effective, language learning communities should be formed either physically or virtually using Moodle, Google Classroom or other educational conferencing systems. A consultation or feedback system should also be a part of this environment. Therefore, the first key element for a holistic flipped classroom would be authentic or near-authentic language community.

Second, flipped teaching. As flipped teaching involves having learners study lecture contents at home while having interactive activities for language enhancement in class, learner-centredness is at its core. Tudor (1996) contends that learner-centredness is crucial for language learning, as students all have their own ideas, opinions, experiences, and areas of expertise. Accordingly, the interactive in-class activities should provide such chances for learners to use language to express what they are knowledgeable or skillful of. In line with that, the design of interactive activities may as well be task-based group activities, in which a group of learners collectively take responsibility for and control of their learning. Technologies for flipped teaching involved video making tools, from the more professional green room to the convenient smartphone video camera, video editing tools, the most user-friendly one to record – iMovie. Or dependent on the nature of a specific language course, existing video resources such as YouTube education channel or TEDTalk can also be used to save time for instructors. For in-class tools, mainly gaming tools such as Kahoot!, reflection tools such as Mentimeter, or group brainstorming tools such as Padlet are recommended.

Third, project-based assessment. Project-based learning is frequently associated with learner-centred teaching for the reasons that the transfer of responsibility for the management of learning from teacher to learners, and therefore ‘autonomy becomes a fact of life’ (Tudor, 1996, p.219). In addition, the type of learning activities which are activated by project work, such as discussion, negotiation, suggestions, and argument of the project objective, reading of reference language materials and organization of material, or even the final presentation are built for all four language skills. Furthermore, strategic and linguistic opportunities are embedded in a collaborative project.

Methods

A mixed method using pre- and post-course questionnaires and interview was used to evaluate the effectiveness of the Holistic Flipped Classroom (HFC) model for ELT.

Research was conducted through a five-week English interactive storytelling course based on HFC. The course was designed for High Diploma Early Childhood Education pre-service teachers in their first year of study at a teacher’s university in Hong Kong. The Holistic Flipped Classroom (HFC) model in this study is composed of flipped teaching, a Moodle-based learning community, immediate in-class feedback with one group consultation session, and project-based interactive group storytelling assessment.

Story creation and storytelling were chosen as the theme due to its potential application in the future work of target students (Hwang, et al., 2016; Lee, 2012; Sauro & Sundmark, 2016). Theories related to the creation of a story, from setting, characters, Freytag’s pyramid for plot development, to the linguistic elements of pronunciation, intonation, vocal variety were made into pre-lecture videos of around 5 minutes each, with pre-lecture quizzes of less than 10 questions following the videos. The design of in-class activities mainly followed the sequence of further mastery checking and clarification of story creation or storytelling theories through examples, game-based activities, group story development and teacher/peer immediate feedback. In addition to in-class feedback, further teacher-student consultation sessions were

conducted towards the end of the course before the final assessment. A group interactive English storytelling project was employed as the final assessment. Students were formed into groups of 4-5 and were explicitly instructed that the stories created by each group should be original and would be posted on a website for general audience or particularly for K3 kindergarten students.

Participants

The participants were 24 Year 1 Early Childhood Education majors in a non-credit-bearing required English enhancement course during the Spring semester of 2019 with the author as their instructor. The participants were mostly female and between the ages of 19 and 20. Their English proficiency was considered to be mixed from lower intermediate to upper-intermediate level, even though they have studied English for a minimum of 12 years through secondary school. The upper-intermediate level students studied their English at English-medium instruction (EMI) schools and have obtained level 4 or above at the Hong Kong Diploma of Secondary Education Examination (HKDSE), suggesting that they could express a range of ideas fluently with occasional hesitation, speak English with pronunciation without causing comprehension problems for the listeners, and are able to initiate and maintain exchanges in a sustained manner, especially when with a sympathetic partner. The lower-intermediate to intermediate level students have obtained a level 3 at HKDSE or have obtained passing scores from English courses from their previous associate degrees or above that were considered the equivalent. According to the descriptors of level 3 in English language of HKDSE, these students are able to understand literal spoken English when delivered at moderate speed in familiar accents in familiar situations, identify speakers' attitudes and intentions when they are explicitly expressed, use a range of simple common expressions with fluency, pronounce familiar words accurately, and respond to others in a sustained manner.

Procedure

Before the start of teaching, students answered a pre-course questionnaire about their level of interest in storytelling and confidence in terms of English speaking, which collected the information necessary for identifying correlation between confidence-level and perceived learning outcome in HFC. A post-course questionnaire surveying students' preference on various HFC elements was distributed through Google Forms. Out of 24 participants, 16 responses were received. To further understand students' survey responses, 9 students with varied English proficiency levels were invited for an interview towards the end of the course.

Findings

Twenty-three responses were received in the pre-course survey, among which 61% prefers learning English storytelling. The result showed that approximately 50% were confident with English speaking, while the other half were not. In terms of technology use, only 5 out of 24 students do not use technology for language learning, while most used Rapid Communication Technology, online multimedia, online dictionary or language learning websites, and are familiar with mobile-learning.

Sixteen responses out of 24 were received from the post-course questionnaire on HFC.

The results of the questionnaire revealed that a majority of learners preferred HFC (83.3%). Regarding the pre-lecture components of HFC, 93.8% respondents believed that the design of the 5-minute pre-lecture videos and pre-lecture quizzes were conducive to their understanding of course contents and help them prepare for in-class activities. Interviews with selected students also showed that a majority had completed both pre-lecture components before class.

Regarding in-class activities, positive team dynamics were only reported by 68.8% of respondents, while 25% reported limited idea exchange during team discussion. 6.2% reported no interaction with the team, where story ideas were conjugated by individual team members without collaboration. Further interviews showed that groups with optimal team dynamics also reported higher contribution (50%) to story creation after class.

Learner autonomy was surveyed using questions regarding students' self-initiated activities outside class. All respondents claimed that they have made some efforts in improving their pronunciation, learning higher level vocabulary, reading reference books for story creation, and correcting their own grammatical errors (See Figure 1).



Figure 1. Students' Language Learning Effort outside class time

In terms of students' perceived learning outcomes, a majority agreed that their fluency, pronunciation, story creation skills, and confidence improved (See Figure 2). Only 1 student was dissatisfied with her progress in fluency and pronunciation.

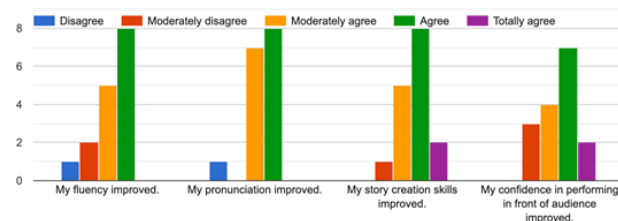


Figure 2. Students' perceived Learning Outcome

Open-ended questions were also used to collecting students' feedback. Most respondent expressed appreciation of HFC, claiming that 'flipped classroom approach really help [her] study', 'class activities are fun', 'group storytelling is good for [their] future career'. Some respondents recommended that more time or story examples be given to students 'to create and practise their telling stories skills'.

A comparison of pre- and post- course surveys shows that students with lower levels of English proficiency in speaking tend to have less satisfaction from HFC, especially if they form groups with learners of similar language confidence level.

Students who attended face-to-face interviews responded that:

1. A majority has completed the pre-lecture videos and quizzes before class. 2 out of 9 students didn't complete the pre-lecture videos and quizzes. However, they claimed that they learned the theories and lecture contents through discussion with their group mates during the group discussion session and through in-class mastery checking activities.
2. Regarding in-class activities, the interviewees all claimed that they appreciate the use of technology which effectively clarify concepts and theories for them. Additionally, they believed that game-based activities and group discussions are conducive to improve their motivation in learning.
3. All interviewees highlighted their preference in project-based team work. They expressed their appreciation of 'getting fresh ideas from team members', which positively impacted the story creation process.
4. Interviewees also expressed high levels of satisfaction with their final products, i.e. the stories they have created within the teams.

Discussion

The most notable findings of the study were that (1) the students were mostly appreciative of the flipped teaching model more than the traditional one, in particular the project-based assessments and interactive in-class activities supported by a combination of technology, game-based learning and group-based discussion were perceived by learners as conducive to their learning, (2) group-based creativity in the form of story creation were highly appreciated by learners, (3) the development of learner autonomy through this research was not as evident as had expected.

Learner-centredness and HFC

From the findings, it is clear that learner-centredness should be at the core of Holistic Flipped Classroom Curriculum design, as learners appreciated components which allows for them to take their own responsibilities in learning, which is in line with Barnes and Ferris' (2007) observation that this next generation of learners need self-directed learning opportunities. In HFC, the flipped classroom approach in itself is first and foremost in promoting student-centred learning, as learners can study at a time and place that are most effective for their learning instead of being expected to learn with peers in class. Second, project-based assessments also set the learners at the centre of objectives setting, problem identification, solutions' brainstorming, resource collection, and project time management – the skills of which they can foresee required by their workplace in the future. Additionally, in-class activities that involve elements of entertainment, competitiveness and interaction also motivate students to be more sustained. Gamification, for instance, has learners work as individuals with reference to their 'competitors'/peers on a task (Lin, Hwang, Fu & Chen, 2018). A purposeful and playful learning game can act as valuable mediation to active learning (Prensky, 2007). The comprehension check games on Kahoot! in this course were observed to be effective in getting individuals set for their further discussion in class. Lastly, task-based group activities also allows opportunity for individuals to be independent and critical thinkers to contribute to team story creation (Priego & Liaw, 2017). This component is most appreciated by learners in this research, as they learned the different values, perspectives and knowledge from other individuals in

their team, which made their story more creative and thus leading to better sense of achievement.

Creativity is also a key elements in HFC, granting students opportunities to explore their competencies other than language proficiency. This was especially evident in students whose English speaking level were lower than average within a group. Even though teachers may help create positive synergies and promote empathy and mutual understanding in the group, individuals need to establish their confidence and raise their perceived 'status' within a group with their own merits (Shu & Gu, 2018). In group story creation, students with good creative thinking tended to contribute ideas, which sometimes help team members to look beyond their lower language proficiency (Argondizzo, 2012). It gave such students gratification and confidence more effectively than teachers' intervention.

Technology and HFC

Respondents of the study were particularly satisfied with the technology incorporated in this HFC model. First, the Immediate Gratification factor were taken into consideration in the design of pre-lecture videos. The 5-minute videos implied to the learners that minimal efforts were needed before class, even though after watching the 5-minute videos most students reported spending more time doing extra preparation through reading notes and researching for reference stories. It can be inferred that immediate achievements are much more motivational than delayed achievement to the Net Generation.

Second, mobile-learning in class proved to be conducive in mastery checking and group progress review. Despite the debate that mobile apps may not facilitate learning outside class, in class learners were found to use mobile devices for learning activities. Three e-learning platforms were used in this HFC design, i.e. Mentimeter, Padlet and Kahoot!. Mentimeter, for instance, offers a platform where learners can brainstorm concepts or theories they have learned from pre-lecture components. With the result projected on the screen in front of the whole class, learners were engaged in a process of self-evaluation and reflection. Padlet, on the other hand, is most effective for the purpose of group progress report. As all teams can project their products on Padlet at the same time, peer learning also occurs; learners can view one another's work, learn ideas and compare progress from the same platform – a process which is democratic by nature. Kahoot! as was discussed previously presented a gamification element, which a learning activity with entertainment and competitiveness.

However, it is also noted that the percentage of online platforms for teacher-learner communication were minimized in this HFC design. The main rationale was that language learning is more effective with authentic language environment. The communications that occurred in class where teacher and peers were present in person are considered more effective than any online communication platforms where talking heads of students and teacher were presented. It has been observed that being online talking from different locations where individuals are situated projects more a sense of individuality rather than that of collectiveness of a community (Huang, Wang, Tsai & Lin, 2017; Lage, Platt & Treglia, 2000; Liu, Wang & Tai, 2016). Therefore, in ELT, online communication platforms may be better replaced by real-life language learning communities.

Learner Autonomy Reviewed

Learner autonomy was less evident in this research as had been expected, the explanation of which is probably that the length of the course (5 weeks) was rather insufficient for the development of autonomy and teacher/peer support from the community was accordingly inadequate. Time limitations did not allow for the in-depth exploration of learner autonomy issues that is necessary to fully establish independent learners in practice. Moreover, according to Little (1991), autonomy is both 'independence and interdependence' (as cited in Blin, 2004, p. 89), which implies that learners may not successfully develop autonomy without both their own deliberate effort, scaffolding from teachers and support from peers. While the forming of individual self-study habits may be dependent on a learners' academic and social resilience, such autonomy cannot be formed if learners are not aware of their personal learning styles and the techniques that work best for them, which could be opened up with the guidance from teachers. As was observed by Thompson (2013), despite the assumption that digital natives are more independent and self-sufficient with technology, teacher's scaffolding in metacognitive, cognitive and social/affective strategies are still crucial in the success of their students' learning process.

These next generation of learners expected multiple stimuli from interactive environments, multiple forms of feedback, and assignment choices that use different resources to create personally meaningful learning experiences (Sharpe, Beethan & De Freitas, 2010; Tindall-Ford, Chandler & Swell, 1997). Hence, a revised holistic flipped classroom model, as shown in Figure 3, is proposed for ELT.

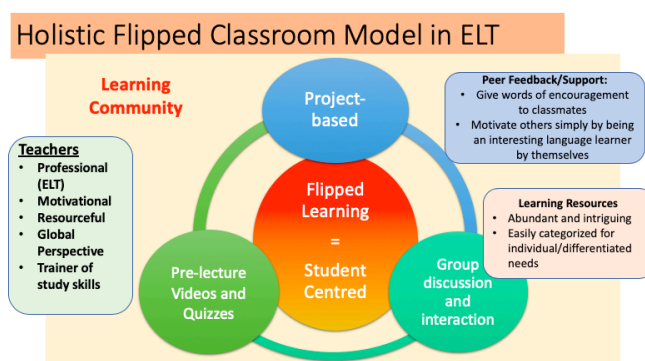


Figure 3. Revised Holistic Flipped Classroom Model in ELT

Conclusion

This study aims to examine the components of a holistic flipped classroom model for English language teaching at tertiary level. The characteristics and properties of a HFC curriculum with respect to its potential for the development and exercise of learner autonomy and of language use. Three key components, that is an authentic or near-authentic language learning community, flipped teaching, project-based assessment, were explored through the HFC model in a tertiary level Early Childhood Education pre-service teachers' English enhancement course themed on interactive storytelling. The research found that learners' preference for HFC model is high as is consistent with the results from researches on learning patterns of next generation of learners and learner engagement was high under the HFC model.

The application of technology under this model appears to have achieved its purpose in promoting language learning through enhanced learning motivation. It is argued

that in language learning in particular not all components of the pedagogical design should be put online, as authentic human communication is crucial to the learning of major language skills such as listening and speaking.

The development of learner autonomy, though seems to be modestly enhanced through this model, was not high due to the constraints of insufficient time and community. As indicated by Cory (2004), learner autonomy is crucial as 'in a fast changing world, the most valuable skill is the ability to adapt and retrain and pick up new skills and knowledge' (p.2). Given a larger research base and time, it is highly likely that HFC's effects in enhancing learner autonomy can be observed.

This study provides some insights into potential of HFC for the purpose of enhancing learner-centredness. However, for the model to be successful, teachers might need to overcome the fear of additional workload, as contact hours literally remained the same and preparation time may even be significantly reduced after the initial groundwork was completed (Lage et al., 2000).

Some teachers may also have doubts over whether all English course can be flipped holistically. My argument would be that since language learning is by nature learner-centred, as is evidenced in L1 learning, and language is for daily communication be it written or oral, authentic projects are not difficult to find. For academic writing course, for instance, student-initiated online research publications can be applied as a project-based assessment.

Lastly, recommendations are made for further research and technology development for holistic flipped classroom in ELT.

- In terms of teacher training, learner analytics and learner advising should be significant fields to look into. Once a teacher can have instant data analysis from students' learning, it's easier to give students just-in-time, individualized feedback and recommendation of personalized learning resources.
- Technology that supports the forming of authentic learning communities, should be developed. Even though Google classroom and Moodle are upgrading annually, these technology has not yet transcend over physical learning community in terms of effectiveness for language learning.
- Technology to enhance learner autonomy should be developed, through which easily accessible, voluminous learning resources can be allocated to the needs of different learners.
- Online learning resources should be made into modulized materials for Language learner in interactive formats.

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