Flipped Learning Approach: Engaging 21st Century Learners in English Classrooms

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Abstract

Advanced technology in the 21st century brings about new opportunities and challenges in societies throughout the world. Consequently, learners in this century need to be well-equipped with the content knowledge and all necessary skills for their lifestyles and future careers. Many pedagogical approaches have been introduced in English classrooms in terms of responding to the educational reform policies, especially in L2 settings such as Thailand in particular. Regarding the need for new pedagogical approaches in English classrooms to enhance students’ essential skills in the 21st century, the flipped learning approach, an alternative instructional approach where the direct instruction in class time and homework are reversed, has recently received great attention from many language teachers, educators, and researchers. This article aims at providing a theoretical background and how the flipped learning approach can be employed in English classrooms to enhance learners’ engagement and other skills needed in this century. In addition, it attempts to highlight some challenging issues if this approach is adopted for a wider use in English teaching in Thailand.

Keywords: 21st century skills, 21st century education, Flipped classrooms, Flipped learning approach, Flipped learning instruction, English instruction using flipped learning approach

Introduction

In the 21st century, advanced technology is the main driving force that brings new challenges and opportunities as well as paradigm shifts to our society (Khan, 2012; Pacansky-Brock, 2013; Vibulphol, 2015). To survive the immense changes in the society, learners are required to be well-equipped in terms of utilizing media and information technology to support their learning. For instance, technology can be used to support not only classroom activities, but also activities outside the classroom as a useful tool to access knowledge anywhere across the globe. According to Pacansky-Brock (2013), the emerging technologies can support learning outcomes, increase learners’ engagement, and prepare them to become successful learners in this digital era.

Flipped learning has emerged as an alternative approach that integrates the use of technology outside the classroom drawing great attention from educators and teachers around the world. Moreover, English language educators and teachers acknowledge this innovative approach as one of the choices in designing their classroom lessons. This article primarily addresses a brief history, theoretical background and underlying concepts, stressing the four pillars of flipped learning, the components and characteristics of the flipped learning classroom. Also included are studies on implementing the flipped learning approach in different English classroom contexts where English is perceived as a second and/or foreign language, and how flipped learning approach enhances 21st century skills and learners’ engagement in English classroom. The details are discussed and provided in the following section.
**Flipped Learning Approach**

In general, the flipped learning approach is an alternative instructional approach where the direct instruction during class time and homework are reversed. The instructional materials which contain content of one particular unit are introduced and viewed by the learners at home before the class time. Meanwhile homework such as exercises, projects or class discussions are done during class time. The video created by the teacher and posted online or selected from online resources or available commercial materials is the main tool in flipped classroom. (Bergmann & Sams, 2012; Davies, Dean & Ball, 2013; Driscoll, 2012; Green, 2012; Jacot, Noren, & Berge, 2014; Strayer, 2007, 2012; Tucker, 2012)

**A Brief History of Flipped Learning**

Flipped learning became widely recognizable when people listened to Salma Khan in a TED Talk or “Technology, Entertainment, Design Talk” with the phrase “Flip your class” in 2010 or from reading a book written by Jon Bergmann and Aaron Sams released in 2012. However, the first attempt to use the term Flipped or Flipping was found in academic research focusing on learning management systems or LMS done by Wesley Baker in 2000. The term appeared again in the academic research done by Tenneson and McGlasson in 2005. They presented the flipped classroom as the use of technology in a blended classroom in order to provide more time for active discussion (Tenneson & McGlasson, 2005).

Later in 2007, Jeremy Strayer did his doctoral dissertation emphasizing on comparing learning activities in a traditional classroom with those of a flipped classroom that used the intelligent tutoring system. He continued conducting research on using flipped learning and published his research on how learning in an inverted classroom could influence cooperation, innovation and task orientation in 2012 (Strayer, 2007, 2012). During the same period, Jon Bergmann and Aaron Sams found that there were frequent absences due to the location of the school and their homes in Woodland Park, Colorado. Therefore, they began to look for ways to reach every student and created videos for their students and called this idea “Vodcasting” (Bergmann & Sams, 2012). The result of this innovative idea indicated that the students had gained better results in their examination. They began to spread their idea through small audiences at the beginning. Then they attended more conferences until the flipped classroom concept become widespread and recognized by many educators and teachers around the world. In 2012, they founded a non-profit organization called “Flipped Learning Network” which was changed to “Flipped Learning Global Community” in 2016 in order to create a platform for teachers and educators to enhance the discussion and share some ideas on flipped learning.

**The Theoretical Background**

The underlying concept of the flipped learning approach stems from constructivist learning theory that emphasizes students’ role in learning by helping them to become active learners while enhancing their engagement in classrooms. The value of a flipped learning approach is to change the class time into learning activities where learners inquire about the content, interact with one another in hands-on activities, and test their skills by applying knowledge learned from the class to real world situations (Bergmann & Sams, 2012; Bergmann, Overmyer & Willie, 2012; Driscoll, 2012; Hamdan, McKnight, McKnight & Arfstrom, 2013; Strayer, 2012; Yarbro, Arfstrom, McKnight & McKnight, 2014).
The Four Pillars of Flipped Learning Approach
To detail the concept of the flipped learning approach, experienced educators in this field identified the pillars of a flipped classroom that allow flipped learning to occur. These include Flexible Environment, Learning Culture, Intentional Content, and Professional Educator (Flipped Learning Network, 2014).

Flexible Learning Environments
The learning environment in a flipped classroom is characterized by a variety of learning modes being introduced in the classroom including group work, independent study, research, performance and project work that optimize learners’ learning capacity. By participating in different learning environments, learners themselves have flexibility to choose when and where to learn which can gradually and constantly increase their autonomy level.

A Shift in Learning Culture
When talking about a shift in learning culture, there has been the shift from teacher-centered to students-centered approach since we entered the 21st century. Learners in flipped classrooms receive a great learning opportunity and explore the topics in greater depth. In addition, learners are actively engaged in learning new content or knowledge both inside and outside classroom. They can also pace and evaluate their own learning. Meanwhile, the teachers can emphasize the use of classroom interactions to ensure their comprehension of each learning topic.

Intentional Content
The teachers in flipped classroom play an important role in deciding what content they need to teach directly and what should be the appropriate materials to help learners explore outside classroom on their own. Therefore, the content chosen by the teachers is specific content to maximize classroom time, allowing learners to experience various methods of instruction such as active learning, peer instruction, inquiry-based learning, project-based learning or problem-based learning depending on the subject matters and grade level of the learners.

Professional Educators
Since it is essential to carefully choose the content for a flipped classroom, experienced, skilled, and professional teachers are required more than ever. They have to decide whether and how to shift away from direct instruction towards individually directed learning. They also have to decide how to provide the interaction between learners or even teachers and learners. Additionally, the teachers in flipped classroom usually reflect on their teaching and share with others in order to improve their instruction as well as to gain mutual understanding of the particular concept taught in the flipped classroom.

The Role of Learners, Teachers, and Materials in Flipped Learning Environment
The Role of the Learner
In a flipped learning approach, learners are encouraged to take charge of their own learning. Although it may challenge those learners who are used to sitting down to listen to lectures, learners in a flipped classroom are expected to be able to support themselves and work collaboratively with their colleagues in learning. In addition, learners in a flipped classroom are required to explore the content in greater depth by themselves. They are also expected to be able to increase higher order thinking capacity according to the learning opportunities provided by the teachers. Furthermore, learners in a flipped classroom are also actively involved in building knowledge through increased opportunities from participating in the
meaningful learning environment (Bergmann & Sams, 2012; Cockrum, 2014; Lockwood, 2014).

**The Role of the Teacher**
During flipped classroom time, the teachers’ role is typically changed from “sage on the stage” to “guide on the side”. Therefore, the teachers must be knowledgeable in the particular subject matter and also be able to elicit that knowledge from each learner. Due to the fact that the flipped learning approach provides the instruction outside of class time, teachers have more time to work with all learners and actively act as facilitators, coaches, mentors or advisors to help learners inside the classroom. The teachers also have more opportunities to give feedback on each learner’s learning progress and help clarify some misconceptions from learning at their own pace. Another important role of the teacher is to be responsible for selecting the content, authentic materials and creating the content video for learners since videos are the main resources for flipped classroom instruction. In addition, the teachers need to create an alternative assessment for learners to elicit and demonstrate their knowledge according to the prescribed learning outcomes (Bergmann & Sams, 2012).

**The Role of the Materials**
The materials that are typically used in flipped learning classrooms include videos and authentic materials. They are the central materials that contain the contents and direct instructions that are flipped from the traditional classroom. The videos, in this case, are great learning tool for learners in order to help them learn at their own pace outside of classroom. On the other hand, authentic materials such as news articles, advertisements, movies, songs, TV broadcasts, newspapers, magazines, etc. can be useful and meaningful learning materials for both inside and outside the classroom activities in a flipped classroom (Bergmann et al., 2012; Bergmann & Sams, 2012; Driscoll, 2012; Khan, 2012; Pacansky-Brock, 2013).

**Flipped Learning Instruction**
Recently, the flipped learning approach has been introduced in a sequence of learning activities in terms of supporting inquiry-based, problem-based, project-based learning, student-centered learning, and content-based activities during regular class times (Bergmann & Sams, 2012; Cockrum, 2014; Gerstein, 2011; Lockwood, 2014).

One possible flipped learning model that has been used by language educators is derived from the work of Ramsey Musallam. The model is called the **“Explore-Flip-Apply”** model. It is designed to elicit students’ knowledge as they construct and discover themselves (Cockrum, 2014).

**Explore Stage**
In this stage, learners are exposed to an activity, problem, event, or task that they engage in to explore the knowledge required. The learning process can continue until learners can no longer continue learning without certain information. It also should have stressed enough cognitive load without any teacher intervention. Therefore, the activity such as brainstorming or problem-solving activities can be introduced to trigger learners’ desire to learn.
**Flip Stage**
The video instruction is needed in this stage after learners explore the main content from the Explore stage. The video usually contains content that is more focused and class specific. Teachers are able to add necessary content, confirm discoveries, point out the misconceptions and also guide the learners to be prepared for the next stage.

**Apply Stage**
Once learners have learned all the content from the two previous stages, an exercise or assignment can be introduced in order that the learners can apply the materials they have learned. It is also suggested that the teacher can also introduce practices in between Flip and Apply stage so that learners can practice more skills before they are assessed.
Gerstein (2011) suggested four stages in conducting the classroom by applying the flipped learning approach based on the learning theories and instructional models of Experiential Learning Cycles. The four stages include Experiential Engagement, Concept Exploration, Meaning Making and Demonstration and Application. Each stage is described below.

**Experiential Engagement**
During this stage, learners are engaged by a series of experiences, an authentic or hands-on activity presented by the teacher. Each learner’s attention will be drawn from the concrete experience through personal connection and desire to create meaning for and about the experience during class time. As a result, learners will become interested in the topic and motivated to learn more from positive experiences such as simulations, experiments, community projects or even arts activities.

**Concept Exploration**
Learners learn more concepts that they have touched upon after experiencing the Experiential Engagement stage usually via videos, content-rich websites and virtual simulations online and/or printed and online reading materials. This is the time that the videos and other materials are used to help students learn the abstract concepts related to the topic for each learning unit.

**Meaning Making**
In this step, learners reflect what they have learned, discovered or experienced from the previous stages. There are several ways for learners to articulate and construct their knowledge or the content covered in each learning unit through blogs and audio or video recordings. Meanwhile, quizzes and tests can be used to check their comprehension of the content being learned and it can be done through either verbal or written exams.

**Demonstration and Application**
Learners get to apply their knowledge from all the previous stages and demonstrate what they have learned individually or via collaborative group work. Therefore, discussion, creative projects or presentations are encouraged to extend learners’ knowledge beyond the lesson which can be related to their everyday lives.
Flipped Learning Approach in Comparison with Other Approaches in English Classroom

To compare the flipped learning approach and other approaches to English classrooms especially in Thailand is another issue to be discussed. There are certain similar and different characteristics between the various pedagogical approaches.

In English language classroom, it is suggested that language learners should develop language proficiency around modes of communicative competence reflecting communication inside and outside classroom settings. One of the pedagogical approaches applied in teaching and learning English in Thailand is communicative language teaching or CLT approach. This approach allows learners to learn and practice the target language through interaction with one another and the instructor (Brown, 2014; Littlewood, 2011; Nunan, 2015). However, this approach views learner-centered classroom as the rule rather than exception and relies extensively on the functional-notational syllabus which places heavy demands on the learners. Moreover, this approach tries to promote fluency in speaking rather than the notion of accurate grammatical structure (Doman & Webb, 2017).

Another teaching approach that has been introduced in Thailand along with communicative language teaching is task-based language teaching also known as TBLT approach. In comparison to CLT approach, TBLT emphasizes classroom interaction, learner-centered teaching, authenticity of tasks and materials, and learners’ experiences of learning. Despite using the tasks that are related to the real world situations, the issue of task complexity has been questioned by language educators and practitioners. In fact, learners need to have sufficient knowledge and competence in order to complete a task in a TBLT classroom (Brown, 2014; Littlewood, 2011; Nunan, 2015).

Similarly, the flipped learning approach emphasizes the interaction between learners through completing tasks and projects including communicative and collaborative tasks. However, the need for language instruction particularly of complicated grammatical structures that is introduced in classroom is reversed. The flipped learning approach allows instruction to happen outside of classroom via the use of video. Therefore, the time in classroom is primarily dedicated for language skills practice in which learners can get more direct feedback from their peers and the instructor as opposed to the time allocation in CLT or TBLT classroom. Additionally, the flipped learning approach allows for a great amount of engagement with authentic materials outside of the classroom since it provides learners more opportunities to learn whenever and wherever they like unlike completing tasks in CLT or TBLT classroom (Doman & Webb, 2017; Sakulprasertsri & Vibulphol, 2016).

English Instruction Using the Flipped Learning Approach in L2 Context

Although there are limited empirical studies on the application of flipped learning approach in English language classroom especially in Thailand, several educators and researchers attempted to explore the use of English instruction using the flipped learning approach in different L2 context.

To begin with, Hung (2015) attempted to study the possible impacts of applying the flipped learning approach in an English classroom in a Taiwanese university on learners’ academic performance, attitudes, and level of participation. The researcher divided the participants into three groups with different technology tools, namely WebQuest, or an inquiry-oriented lesson format in which most or all the information that learners work with comes from the web. A blended-learning environment was implemented for experimental group I in the form of a structured flipped classroom. TED-Ed (Technology, Entertainment, Design for Education) was used as the technology tool for experimental group II or semi-structured flipped classroom. Finally, traditional printed materials and TBL (Task-based
Learning) for the control group or non-flipped classroom. The findings revealed that learners in the flipped classroom earned higher scores on each lesson assessment suggesting that the academic learning outcomes were significantly improved. Moreover, learners showed positive satisfaction towards learning in the flipped classroom environment, learning materials, and the integration of technology and multimedia resources. The participation level of learners in flipped classroom was higher than those in traditional ones. Accordingly, the researcher suggested that adopting different instructional designs together with the flipped learning approach could help learners become more active in learning English.

In another interesting research design using the flipped learning approach, Chen Hsieh, Wu, and Marek (2017) explored the effects of using flipped instruction in an EFL classroom in Central Taiwan on the differences in the participant’s idiomatic learning outcomes between the flipped instruction and traditional classroom. They also examined students’ perception towards learning in the flipped classroom. The results revealed that using flipped instruction effectively and significantly enhanced students’ oral ability and motivation. The participants engaged more in learning tasks and became more competent in using English idioms for communicative interaction, storytelling, drafting conversation dialog, discussion, and group presentations. Furthermore, the research suggested that using LINE as an EFL learning platform could become one of the technology applications to provide authentic voice and text interaction.

Additionally, research on flipped classroom was also conducted in Macau. Doman and Webb (2017) examined the attitudes of Chinese University learners who study English as a foreign language towards the flipped learning experience. In this particular study, the participants were engaged in the flipped classroom environment with different technology both inside and outside classroom including blogs, wiki pages, Moodle, Google Docs, independent language learning sites on the English Language Center (ELC) site, clickers, online quiz applications, and video-making tools. The data obtained from surveys and interviews suggested that the flipped classroom has positive effects on the use of technology in terms of supporting learning, social presence, and teacher orientation. In addition, learners became more active, engaged, and responsive in the lessons. Therefore, learners in flipped classroom had more positive attitudes toward learning English than those in the non-flipped classroom.

In Thailand, Sakulprasertsrri and Vibulphol (2016) conducted research on applying four stages of the flipped learning approach suggested by Gerstein (2011), namely Experiential Engagement, Concept Exploration, Meaning Making, Demonstration and Application in an English classroom to teach upper secondary students about the ASEAN Community. Their research objectives were to examine the effects of English instruction using flipped learning approach on students’ oral communication ability and students’ motivation in English learning. The findings revealed that using flipped learning approach in the English language classroom enhances students’ English oral communication ability. The students also reported that they were engaged more in the flipped instruction environment. In addition, the level of students’ motivation in English learning was higher resulted from experiencing learning in flipped learning approach. The researchers suggested that further studies on the effects of flipped learning approach on listening, speaking, and writing skills should be conducted.
Flipped Learning and 21st Century Skills
According to P21 or The Partnership for 21st Century Learning (2015), the collaborative partnerships among education, business, community, and government leaders in the United State of America to emphasize the importance of 21st century skills for all learners regarding the constant change throughout the world, they recognize there are three main skills that 21st century learners must have namely information and communication skills, thinking and problem-solving skills, and interpersonal and self-directional skills in order to be ready for the challenges in the 21st century and beyond.

Under the three main skills sets as mentioned above, each contains sub-categories in order to assist educators and teachers in designing lessons and learning activities in their classrooms. First, on information and communication skills, learners are expected to develop information, media literacy and communication skills. Second, regarding thinking and problem-solving skills, learners are supposed to be able to think critically and systematically, identify problems and solutions, be creative, and have intellectual curiosity. Lastly, with regard to interpersonal and self-directional skills, learners are expected to develop their interpersonal and collaborative skills, self-direction, accountability and adaptability, and social responsibility.

One possible way to help 21st century learners to develop 21st century skills suggested by the partnership for 21st century learning (2011) is to use 21st century tools. It is undeniable that information and communication technology or ICT such as computers, social networking, audio, video, media and multimedia and other technologies play an important role in 21st century learning context. These 21st century tools are enablers for learners to perform what they have gained from the classroom more effectively. By using these tools, the traditional classroom will be transformed from where teachers are the center of the classroom to the 21st century classroom where learners are the most important part.

Hence, the flipped learning approach has stood out as an alternative pedagogical and practical approach that has been recently introduced in teaching not only core subjects like Mathematics and Sciences, but also English language across the globe to help learners develop 21st century skills. For instance, learners gain content knowledge and develop their information, media literacy, and self-directional skills via the use of technology outside classroom. On the one hand, the learners develop interpersonal and collaborative skills with their peers through the tasks inside classroom (Baker, 2013; Bergmann & Sams, 2012; Cockrum, 2014; Lockwood, 2014; Morris & Thomasson, 2013; Witten, 2013). In addition, it has been proven that learners engage more in the lessons and become more active learners after participating and experiencing flipped instruction (Doman & Webb, 2015; Hung, 2015, 2017; Lee & Wallace, 2017; Moranski & Kim, 2016; Sakulprasertsri & Vibulphol, 2016).

Opportunities and the Way Forward
It is ultimately undeniable that opportunities and challenges are seen by both teachers and learners when introducing the flipped learning approach in teaching to English language classrooms, especially in Thailand and other countries where English is a second or foreign language. In addition, the flipped learning approach helps 21st century learners develop 21st century skills.

To begin with the opportunities, the flipped learning approach provides more time for learners during the teaching procedures to practice English language through various learning tasks and activities such as role plays, simulations, games, discussion, and presentation. Consequently, learners engage more in the learning environment and become active learners (Hung, 2015, 2017; Lee & Wallace, 2017; Sakulprasertsri & Vibulphol, 2016). Moreover, learners are able to expand their knowledge and broaden their horizons via content-based
activities through flipped instruction. In terms of teachers and instructors, the flipped learning approach allows them to develop or choose materials related to real world situation or current issues with the integration of technology. Therefore, learners can utilize technology as a tool to access learning materials and gain more knowledge by themselves anytime and anywhere. More importantly, the flipped learning approach also develops information media and technology skills for learners as one of the required skills in the 21st century.

Apart from providing opportunities for learners to be more engaged in the lessons and become active learners, the flipped learning approach also supports teachers to become active facilitators. Apparently, teachers in the flipped learning environment or classrooms need to prepare the learning materials in advance and update the materials with current situations, especially in English classrooms where English is widely used as a means to communication throughout the world. Consequently, in the flipped classroom teachers will not only teach and prepare all learning materials, but they also facilitate their professional learning and development, link the flipped learning approach with suitable practices, introduce innovations to the classroom, and conduct research to help improve their students. Therefore, the teachers will enhance their eagerness to challenge themselves in order to make their teaching more efficient, turn themselves from passive teachers to active teachers, and develop 21st century skills required for 21st century teachers at the same time. Thus, the government should acknowledge the benefits of implementing the flipped learning approach in English classrooms and try to promote this approach to all teachers in terms of supporting active learning, enhancing learners’ engagement, and practical assessment.

Due to the fact that the flipped learning approach is recognized as one of the newly developed alternative pedagogical approaches that can be implemented in the classroom, there is no doubt that there will be some concerns about how to implement this approach. According to flipped learning educators and researchers (Bergmann & Sams, 2012; Doman & Webb, 2015; Hirsch, 2014; Hung, 2015, 2017; Lee & Wallace, 2017; Moranski & Kim, 2016; Sakulprasertsri & Vibulphol, 2016), there are several suggestions on how to implement the flipped learning approach in English classroom. First, define content scope, learning outcomes and activities, and instructional materials. It is necessary for language educators to plan well before the implementation which is not only the flipped learning approach, but also other approaches. Both teachers and learners should have clear teaching and learning objectives and outcomes to accomplish before, during, and after the class. Additionally, it is beneficial for teachers to create videos or other materials that are suitable for each lesson and plan the in-class activities that provide learners opportunities to deepen their understanding and attain higher-level cognitive abilities as one the main characteristics of flipped learning approach.

Another suggestion to implement the flipped learning approach is to prepare learners for this unfamiliar approach. Since learners are more familiar with the traditional approaches or other approaches in the language classroom such as CLT, TBL, PPP, etc., it is essential that learners should be trained to become familiar with all teaching procedures and how to utilize the videos and other materials prior to learning in the actual flipped classroom. Another important suggestion is to design an appropriate evaluation and assessment system. It is certain that designing assessments for language learning is crucial. Both ongoing formative and summative assessments are recommended as ways to assess learners’ understanding and how learners master the language after experiencing in flipped learning environment. By using formative assessment, teachers will recognize how learners develop concepts of learning language according to particular learning outcomes as stated earlier at the beginning of a unit or lesson. Meanwhile, summative assessment is fundamental in terms of checking how learners learn English and form the content knowledge throughout the
course. To engage learners on this, teachers may get learners more involved in designing course evaluations and assessments at the beginning of the course. Last but not least, classroom-based research in implementing the flipped learning approach need to be conducted as a valuable effort to transform traditional English classroom and help learners to become successful 21st century learners of English.

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