An Integrative Review of Flipped Classroom Model

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Abstract Blended learning is a style of education that allows the instructors to come up with new and useful approaches and methods for improving the teaching and learning process. According to King [1], the term 'blended learning' has been defined in a variety of ways in which all commonly entail two things: asynchronous (online) and synchronous (face-to-face). This indicates that blended learning merges the elements of both face-to-face and online instructions to help teachers and learners in the process of teaching and learning. The universal types of blended learning among EFL/ESL teachers are Lab Rotation, Station Rotation, Individual Rotation, Flex, and Flipped Classroom [2]. Although they are popular methods of teaching and learning, limited studies carried out to confirm their implications in educational practice. Multiple pieces of research, generally, conducted on blended learning, not on its specific types [1,3,4]. To this end, this paper presents a review of the research related to one of the typical types of blended learning (Flipped Classroom) in teaching different language skills and component to justify its practice in classroom teaching.

Keywords: blended learning, concept, flipped-classroom


1. Introduction

The term 'Flipped Classroom' assumed to have a broad definition connecting itself to different leaning activities and platforms, including both inside and outside classroom learning modes. Flipped classroom teaching is a pedagogical technique and learning type, which is different from the traditional classroom and learning. The main goal of the Flipped Classroom is to focus on learners. Typically, a traditional classroom is teacher-centered; while, the Flipped Classroom learning is student-centered. More precisely, in a conventional classroom situation, instruction is given to students to complete a task. On the other hand, in a Flipped Classroom teaching setting, the teaching content, as well as activities, are provided online to students in advance so that they get access and read through the materials before attending the classroom. Therefore, when they attend the actual classroom, they are entirely familiar with the content of the lesson and activities [5]. As a result of this type of collaborative instruction mode, students can have the chance to engage in the process of learning thoroughly. Bloom’s Taxonomy framework adapted by Lopex [6] provides a clear comparison between conventional and flipped classroom.

![Figure 1. Traditional and Flipped Classroom Framework of Bloom’s Taxonomy](image-url)
2. Theoretical Framework

The Flipped Classroom underlies the constructivist model. Learning is a social and dynamic process. On the bases of this theory, students can connect their past experiences with existing information to construct comprehension of new material. Vygotsky [7] believes that learning is a process that occurs when a learner is interacted and assisted by more skillful learners or those who possess merit language skills, and that learning is streamlined by cooperation inside the student’s zone of proximal advancement. Vygotsky [7] described the zone of proximal development (ZDP) as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance, or in collaboration with more capable peers" (p.34). The other way around, most frequently, learning takes place when a learner is engaged in a problem-solving activity beyond his/her competences with a more proficient peer. Therefore, in the Flipped Classroom, when students are involved in a problem-solving activity either in a group or individually in which they are required to use the information they mastered through online videos, learning occurs. Eppard & Rochdi [8] argued that literature indicates that students get the best out of their studies when teaching reflects their learning styles, such as collaborative, dependent, or independent.

Besides, the cognitive development theory of Piaget believes that the same as scientists, learners attempt to make sense of reality. Direct presentation of information does not help students learn. Instead, they must construct their insight and knowledge based on their experience of that particular information. Experiences assist them with mental models or make mapping in their mind. These planning are altered, expanded, and formed more complex throughout the two processes of accommodation and assimilation. As indicated by the theory of Piagetian cognitive constructivist, to get into a more significant level of learning, learners require to cooperate with their peers encountering "cognitive conflict" to acquire the knowledge. The Flipped Classroom model practices these two critical components of cognitive constructivism. The primary components are that learning is dynamic because students are exposed to the learning materials such as videos before attending the actual classrooms. The information is then introduced in the classroom in the form of a problem-solving task. Hence, this facilitates and furthers the learning process as a tool.

3. Conceptual Framework

The conceptual framework starts with the definition of the Flipped Classroom following with the need for the study and then providing a review of it in teaching of four language skills and component. It also includes the theoretical framework for the study. It addresses the implementation in practice and education, and concludes with recommendations.

The Flipped Classroom model plays a significant role in teaching and learning of four language skills and components. On the view of Sadiku [9], any language can be easy or difficult. Language is used to serve a variety of purposes in communities. There will not be any communication if no language exists. It has been played a significant role in human life since birth, and the four language skills such as reading, writing, listening, and speaking play an essential role in any language learning. Therefore, high standards should be set up for ESL/EFL classrooms. Instructors should work to provide the necessary conditions for the learners to help them learn the language efficiently and achieve their ideal outcomes.

Successful teaching involves the integration of the four language skills. Reading, writing, listening, and speaking ought to be tended in such a way that assist learners with fulfilling the guidelines the instructors set for them and build up their communication skills progressively. Based on the Sadiku’s view [9] “Four skills activities in the language classroom serve many valuable purposes: they give learners scaffolded support, opportunities to create, contexts in which to use the language for exchanges of real information, evidence of their ability (proof of learning) and, most important, confidence” (p.30). Thus, the Flipped Classroom can help the teachers to meet the above standards and requirements and reach their desired outcomes.

Also, having knowledge of grammar plays a vital role in the receptive (reading and listening) and productive (speaking and writing) skills. Students who know grammar can perform well in their academic life and sound more competent. Though people speak their native language without taking any classes due to language exposure, when learning a foreign language, the necessity of grammar cannot be neglected and ignored. They can perceive and produce the language, but they are not able to explain the usage and grammar rules. Debata [10] claims that the mastering of four essential skills is an indication of knowing the language. Knowing the language enables us to understand the meaning of any individual word, sentences, or grammatical rules.

Furthermore, the use of language in discourse means to utilize grammatical patterns properly. Pekka [11] thought of grammar as the heart of the language. Dalil & Harrizi [12] stated that grammar plays a significant role in the language. It allows the user to produce meaningful and grammatical sentences. It also serves a vital role in reading and writing skills. Students who have good command of grammar can correctly understand the reading texts and produce well-written texts. Besides, they can communicate and exchange their ideas with others more effectively.

In regards to the mentioned concepts, this paper intends to explore and bring the attention of the language teachers about the effective way of teaching different language skills and components such as reading, writing, listening, speaking, and grammar through the use of Flipped Classroom to substantiate its effectiveness and practice in the classroom.

4. Need for the Study

An excessive body of literature shows that blended learning has positive effects on students’ learning [13,14,15]; however, there is limited research on Flipped
Classroom to indicate how effective it can be in teaching and learning of four language skills and components. In the recent years, a few studies have been conducted to examine whether Flipped Classroom can facilitate ESL/EFL language learning and development [16-21]. Iyer [5] examined if ESL Flipped Classroom approach can help learners develop their English proficiency level in the Faculty of Arts, Jaffna University. The researcher used a flipped-classroom approach as a scaffolding technique, and 27 first year Tamil students participated in the study. The results of the collected data through observation, verbal report, and a questionnaire demonstrated dramatic progress in the participants' English proficiency level. The fact is that experienced tertiary level ESL/EFL teachers know that the allocated hours for teaching ESL/EFL classes are not adequate since language learning requires lots of practice inside and outside the classroom; therefore, a useful technique such as Flipped Classroom must be employed to facilitate language learning.

Nowadays, the conventional classroom teaching approaches found to be ineffective. Also, the concept of teaching, transforming information, and students' expectations have altered due to the use of technology in the classroom. The traditional classroom no longer responds to the expectations of the students; and so, distinct teaching models such as Flipped Classroom are required to reach the expectations effectively. Currently, it appears that there are a few research studies published to indicate the effectiveness of the Flipped Classroom in teaching; however, there is still a lack in providing holistic information on the matter in order to justify its practice in educational setting. As such, this paper provides a review of the studies related to the Flipped Classroom model in teaching of four language skills and component and develops the concepts about what is mostly happening in the Flipped Classroom and how students benefit from it.

5. Flipped Classroom in Teaching Reading Skill

Karimi & Hamzavi [22] examined the impact of Flipped Classroom model on reading comprehension ability of EFL students and their attitudes towards the method in a private language institution in Isfahan, Iran. Fifty EFL students were selected and equally divided into two groups of experimental and control. The researcher collected data through pre and post-tests and a questionnaire on the model. The results of the study revealed that the model had a positive impact on learners' reading comprehension ability and their attitudes towards it. Learners from the treatment group agreed that the model was useful to them in several ways.

Abaeian & Samadi [23] explored the effectiveness of the flipping method on the reading comprehension performance of EFL students with two different levels (intermediate and upper-intermediate) of proficiency in two private language centers in Shiraz, Iran. To collect data, the researchers employed pre and post-reading comprehension tests, and a total of 100 female students participated in the study. The findings indicated a significant difference between experimental and control groups. In other words, the treatment group performance was significantly better than the control group. The results also confirmed that intermediate students gained more benefits of flipped technique than upper-intermediate students. Thus, the results can inform EFL teachers on the effect of the flipping method to preserve their teaching outcomes.

In another study by Chavangklang and Suppasetseree [24] in Nakhon Ratchasima Rajabhat University, a flipped classroom model was employed to investigate its effectiveness on a group of Thai English majored students' reading comprehension. The findings reported that the reading comprehension of the experimental group has considerably enhanced in comparison to the control group in which the traditional form of instructions provided to the participants. Results also showed positive opinions of participants about their learning experiences with the Flipped Classroom model. Hence, the studies vindicate that only reading strategies are not enough to help students improve their reading skills. A suitable learning environment and practicing are also required to motivate and aid students to improve their proficiency level in the process of learning a language. In addition to that, the model has been proven to be an effective strategy in enhancing EFL students' reading comprehension. In the concept of Cockrum [25], the model turns a teacher-centered classroom into a student-centered to facilitate learners in the learning process. Consequently, the flipped model is crucially vital in ESL/EFL teaching because it makes the learning classes go beyond the classroom walls.

6. Flipped Classroom in Teaching Writing Skill

Abdelrahman et al. [26] carried out exploratory research to investigate the influence of writing module on writing proficiency of students and their satisfaction with the module in an ESL writing classroom in a Sudanese Secondary Year 1 School. Twenty-eight participants volunteered to attend the study into two groups. In this particular study, a flipped learning approach was employed to teach learners English paragraph writing. The group under treatment watched online video lectures before attending the class, followed by classroom activities to address their writing concerns to do online assignments and homework later on. The results indicated that participants’ writing proficiency developed, and they were delighted with the use of the method proven by their interactions and engagements with the writing module. The findings can contribute to collaborative writing activities, flexible opportunities for learning, and social interaction circumstances provided by the approach, which results in enhancing students’ stimulation towards writing and increasing their level of confidence.

In the same vein of thoughts, Ekmecki [27] evaluated the effect of flipped classroom instruction on EFL students' writing skills, which is observed to be difficult, complicated, and tedious for the students. The researcher compared flipped and conventional writing classes, and forty-two correspondents participated in this mixed-method study for fifteen weeks. The investigator utilized a pre and post-test true experimental design and analyzed the data through paired and independent samples t-tests.
The findings of the study based on the use of a rubric revealed that experimental and control groups have been significantly different in their writing performance. In other words, the experimental group performed much better in their writing performance than the control group. The results also reported that the treatment group had positive attitudes on the use of the model. Writing is a productive skill that requires learners to have much practice and have a positive attitude about their work to succeed and reach an adequate proficiency level. Sharples [28] stated that the complexity and nature of writing in the EFL context might demotivate learners leading them towards discouragement and negative attitude. Thus, the improvement of positive attitude is an integral part of writing improvement, and the Flipped Classroom can highly contribute to this issue.

Analogous to the other studies, Afrilyasanti et al. [29] investigated the effect of the Flipped Classroom model on Indonesian EFL students’ writing ability in a secondary school. Sixty-two students in two groups of experimental and control attended in the study. Data was collected quantitatively using pretest and post-test and students' writing observations. The results demonstrated a considerable difference in learners' post-test scores. The findings also revealed that there is a relationship between the Flipped Classroom model and learners' learning styles. Therefore, instructors should be very cautious when providing the learning material because not all methods respond to all learning styles.

For this reason, knowing students' needs and learning styles are the perquisites of the Flipped Classroom. In the same year, Ahmed [30] investigated the effectiveness of a flipped classroom on EFL students' writing skills and their perceptions towards flipping at Qassim University. Sixty samples participated in the study in two groups, and a questionnaire and an EFL pre and post writing test were utilized to evaluate students' perceptions towards the model. The findings indicated that the experimental group performed better than the control group in the post-test. The findings also presented that the informants had positive attitudes towards the use of flipping. From the obtained results, we can understand that the Flipped Classroom is beneficial enough for improving students' writing skills and their beliefs towards the use of flipping. EFL/ESL teachers know that mastering EFL writing skills is not easy, and students have to go through some writing process and carry out lots of different practices such as pair work, group work, and independent learning and practice to become competent and obtain the skill; hence, a flipped classroom would be an effective method to overcome the barriers.

7. Flipped Classroom in Teaching Listening Skill

El Sakka [31] explored the impact of the Flipped Classroom instruction on listening comprehension of EFL freshman University students at the Faculty of Education at Sussex University. A pre-post quasi-experimental research design was employed, and twenty-five English majored students participated in this particular study for three months. The results indicated that students listening comprehension improved a great deal as the result of using the flipped model of instruction. In the same way, Ahmad [32] evaluated the effectiveness of the Flipped Classroom model on the listening comprehension of Egyptian EFL students at the Education Faculty of Suez University. The investigator collected videos as the content of the lessons from many different websites. The findings from paired-samples t-test indicated that the Flipped Classroom model had a remarkable effect on improving learners' listening comprehension. Based on the implemented method and obtained results of this research, flipped classrooms encourage students to utilize different online materials via the internet for enhancing their listening comprehension since online videos allow them to listen to authentic materials and be more self-directed towards their learning.

Aligned with other studies, Roth and Suppasetser [33] examined the impact of the Flipped Classroom on Cambodian pre-university EFL learners' listening comprehension and their attitudes towards the use of the Flipped Classroom. The findings revealed that flipped classrooms improved the learners' listening skills. The results also confirmed that students showed positive attitudes towards using it in the classroom and wished other subjects were taught in the same way. The outcomes could be a tremendous help in leading ESL/EFL teachers with teaching English listening skills and enhancing learners' listening comprehension. In short, the same as the other language skills, listening skills improvement requires a great deal of effort and practice. Learners' engagement is critical in the process of skill development because they need to be actively involved in the process to understand and interpret the speakers' intended message. Therefore, traditional classroom instruction can never assist learners in this regard.

8. Flipped Classroom in Teaching Speaking Skill

The result of research by Tazijan et al. [34] on analyzing the impact of the Flipped Classroom approach in improving learners’ speaking skills reported that there is a positive correlation between flipped teaching and active learning. Put the matter another way, the use of flipped learning enhanced ESL participants’ oral communication skills in particular ways. This study shows that flipped learning facilitates verbal communication abilities improvement if a vigilant lesson plan is adapted. To enhance learners speaking skills, they need to practice the language, so this method can suitably contribute to the situation. In the same manner, Quyên & Lợi [35] explored the effect of the Flipped Classroom model on EFL learners’ oral communication performance and their perceptions towards the model at Can Tho University, Vietnam. Sixty undergraduate intermediate level students took part in the study. The findings assured that students' speaking skills improved, and participants showed positive attitudes towards the use of the flipped model in the classroom. The same as the other studies on the Flipped Classroom model, this study affirms that the integration of technology with conventional classrooms can improve students’ academic achievement and language
learning. Also, students highly appreciate blended learning since it increases their motivation and student-centeredness.

Li & Suwanthep [36] evaluated the impact of integrating the flipping model on EFL learners' speaking skills in a Thai university in Thailand. The researchers employed a quasi-experimental design to collect the research data. The treatment group included a total of 46 participants and were provided flipped instruction on lexical and grammatical knowledge through online video lectures followed by role-plays based on the online videos to practice speaking. The control group consisting of 48 students, received traditional or face-to-face instruction doing speaking drills in the textbook without watching video lectures. The results of the collected data showed that the treatment group members received higher scores in the post-test in comparison to the control group. The findings also showed that students demonstrated positive attitudes towards the flipped model and constructive role play. This study implies how effective the direct instruction of lexical and grammatical knowledge can be because students can work on their own pace and watch the videos as many times as they want. Besides, learners have more chances to attain comprehensible input, which is the basis for second or foreign language speaking without spending time in the classroom. As a result, more time will be allocated for the classroom to practice speaking activities under the guidance of the teacher and peer collaboration.

9. Flipped Classroom in Teaching Grammar

Al-Harbi & Alshumaimeri [37] evaluated the application of the Flipped Classroom method in teaching grammar and its effect on EFL students' performance and their attitudes towards the use of the strategy in secondary school Saudi in Riyadh. To carry out the research, the researcher selected videos based on learners' textbook uploading them on EDMODO. Students from the experimental group were required to watch the videos before coming to the class to learn the grammar lessons by themselves and note their concerns regarding the lessons to be discussed in the classroom. However, the control group only traditionally received in-class instruction without watching videos. The results showed that the Flipped Classroom strategy played an essential role in learning English grammar and students' performance. The results of the data collected through semi-structured interviews and a questionnaire also demonstrated that students had positive attitudes towards the use of the flipped classroom model. EFL learning requires lots of practice inside and outside the classroom; as such, such types of studies not only offer a practical solution to the problem but also highlight the problem. This study constitutes that flipping can solve the problem of teaching English grammar since it allows students to learn and practice the language collaboratively as well as independently.

Similarly, Alzaytuniya [38] examined the effect of utilizing flipped technique on grammar learning and motivation of tenth-grade students at Ata Ashawwa Girls' Secondary School in East-Gaza Directorate. Two groups of experimental and control, including 60 EFL female students, participated in the study. An achievement test as pre and post-test was employed to determine learners' homogeneity and differences between the two groups. The results indicated that the treatment group was in favor of using the flipped method, and there was a considerable difference between the two groups in English grammar learning. Accordingly, this study also supports the use of flipping in teaching and learning of grammar to enhance learners' learning outcomes and achievement because only effective methods and techniques such as the flipped model can activate students' participation in the process of learning a language. Also, it helps both teachers and learners to experience different activities and prior knowledge for constructing meaning and understanding concrete grammar concepts. Considering the effectiveness of the Flipped Classrooms on ESL/EFL grammar teaching, we can conclude that it is a useful technique in the teaching of grammar as well.

10. Practical Implication

The notion of flipping a classroom has become very popular throughout different education levels and content areas worldwide. However, teachers who are inclined to flip their classrooms need to be very cautious with their pedagogy and technology being used because the Flipped Classroom requires the same intention as a traditional classroom. The idea of flipping a classroom is not enough; teachers should be aware of its practice on how to implement it for successful results. In the view of Stauffer [39], there are six best ways to flip a classroom.

1. Knowing When to Flip (and When Not To)
2. Starting with Small Changes
3. Helping Your Students Adjust
4. Using More Than Lecture Videos
5. Giving Students Options for Accessing Your Content
6. Finding Ways to Check Work Done at Home

Selwyn et al. [40] found out in a case study that the participant mentioned the following key methods for the success of the model.

1. Utilize accessible and straightforward technology. This form of technology is often free such as Dropbox, Google Hangouts, and YouTube. They are not much complex and fit the purpose. Get instant feedback from students to make sure you are fulfilling your lesson objectives.
2. Utilize actual and authentic life instances. This can encourage students' participation in the activity and assists them in linking the new learning with their actual life experiences.
3. Think through your presentation skills such as clarity, speed, voice tone, and interest on the topic. The way you present new information to your students can affect students' understanding of the subject matter and how they respond to it.

The conclusion which can be drawn from the above-mentioned points is that flipping classroom is not all the time easy; therefore, teachers require to be very clear with their pedagogy and the use of technology when employ it in their teaching contexts.
11. Educational Implication

Literature indicates that the Flipped Classroom is not only used for language teaching, but also for teaching of different subjects such as biology, chemistry, mathematics, physics, nursing, and engineering education. Many different techniques and practice forms of the Flipped Classroom model are being used in various education fields. Chen et al. [41] stated that each letter in the flipped model stands for different subscales. That being the case, any subject area can be taught considering these subscales.

- Flexible Environments
- Learner-Centered Approach
- Intentional Content
- Professional Educators
- Progressive Networking Learning Activities
- Engaging and Effective Learning Experiences
- Diversified and Seamless Learning Platforms

The area of the Flipped Classroom is much broader than what one can think. Each study conducted on teaching of any subjects reported positive effects of flipping on students’ learning. Liu [42] evaluated the effectiveness and the best practice evidence of the model on the development of self-directed learning in nursing. They found that the model had a positive effect on the self-directed learning of the nurses. Syakdiyah et al. [43] examined the effectiveness of the flipping in chemistry education and reported that thermochemistry and students’ enthusiasm for learning from the Flipped Classroom was higher than the controlled group. Kerr [44] explored the effect of the model in engineering education through surveys and figured out the positive gains with the Flipped Classroom. Kara [45] employed a flipped model for medical college students when they were doing an internship and stated that the participants found the internship period very useful through the use of the model. Bhagat et al. [46] investigated the effectiveness of the model in mathematics learning. They confirmed that the model increased students’ engagement, provided more opportunities for learners to communicate with their instructor and helped them grasp the content lesson easier, and achieve their learning objectives.

12. Conclusion and Recommendations

On the whole, the Flipped Classroom, a type of blended learning approach, can be an effective method not only in teaching and learning of EFL/ESL, but also other subjects such as biology, chemistry, engineering and etc. as it allows students to improve their language proficiency and content learning by working both in-class and independently. The review of the literature in this paper clearly shows the effectiveness of employing flipped teaching in the learning process and can be a great guide to the teachers. This form of collaborative teaching and learning is expected to function as an efficient scaffolding technique in the process of learning, increase students’ participation in the actual classrooms, bring a new trend in educational practice, and contribute to the development of four language skills and components and content-learning among learners.

Based on the literature reviewed, a few recommendations on the implementation of the Flipped Classroom can be provided. Hartyányi et al [47] stated that "A key element mentioned earlier is to avoid a prescriptive "one-size fits all" approach" (p.104). When material is given to students for learning and preparing in-class activities, it is necessary to keep in mind that every individual student grasps and interprets the information differently. You must supply the learners with different time span to recall and observe a variety of ideas, instead of imposing what they specifically oblige to do or not and expect that all students will fetch up with similar outcomes. Also, the main requirement of the Flipped Classroom is group work. Students are frequently required to participate in the in-class activities and interact with their peers, and this is one of the advantages of the Flipped Classroom that engages learners in the learning process and allows them to discuss the target lessons with their peers. As such, the teachers must know that the groups are active and activities are well-structured. It is, too, crucial to encourage students' participation in the class activities as much as they can.

Besides, specific abilities and understanding associated with mastering in-class activities will permit one to get extra from the Flipped Classroom technique. At the same time, as the flipping is a hugely efficient and dynamic method, it does necessitate a particular quota of pre-existing skills that allows one to forward it. The Flipped Classroom in-class activities associate with particular challenges and participants. The more students are engaged in classroom activities, the more they benefit and learn. Moreover, teachers may notice contrasting experiences between students in the Flipped Classroom. Similarly, different students may find flipped classrooms more or less efficient in comparison to the conventional classrooms in regards to their skills, learning styles and prerequisite knowledge they have about the topic being taught to them because some students are slower to have interaction in face-to-face classes, and some of them might have favored and needed more guidance.

There may also be an assumption that to provide students with an excessive amount of time and anticipate that they are pursuing the activity delightedly. Even as the Flipped Classroom obliges students to study at their own pace and independently, the teachers are required to instruct and engage students in the face-to-face discussions to provide them the possibility of asking questions, seeking clarification, etc. The main aim of this recommendation is to facilitate in-class sessions and students as often as possible. Last but not least, it should be remembered that flipping the classroom might not be proper for every individual student and subject matter. Therefore, the decision must be made by the teacher on how and when to utilize flipped classrooms to assist learning. The fundamental idea to identify this is to evaluate what is needed to be taught and which online materials are proper for in-class activities. If there is a lack of online resources for in-class activities concerning a particular subject, the practice of flipped classrooms might not be appropriate.

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