

## Challenges faced by educators in the implementation of Flipped Classroom

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### Abstract

This study intends to provide a review on the challenges faced by educators in the implementation of flipped classroom and ways to overcome the challenges. This review paper was written based on interpretations done on previous literature covering multiple aspects in the field such as roles or ability of teacher, students and area of study. Mainly, it focuses on the limitations in terms of time management, technological necessity and facilities, heavy demand on teacher functionality, interests and involvement of students which are handled by the teachers. This paper determines the existing demands of this approach and suggests the measures to be taken by the educators who are enthralled to embrace and practice this concept in classroom in the time that is to come. In general, this article provides essential information about the nature and difficulties to implement the flipped classroom approach, its limitations, the extent of expectations on teachers and some useful suggestions to overcome the issues.

### Keywords

flipped classroom;  
demands; educators;  
challenges;  
suggestions

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## INTRODUCTION

In creating an ideal 21st century learning environment, ample of work has been done which contributed to the modernization of the teaching and learning practices. This modernization involves the usage of technology, blended learning, higher order thinking skills which require intense level of engagements and commitments from both educators and students. The modern teaching and learning techniques seem to have gained a decent amount of popularity in the education field especially language learning because active engagement is vital in language learning as it promotes to an exciting and motivating learning experience.

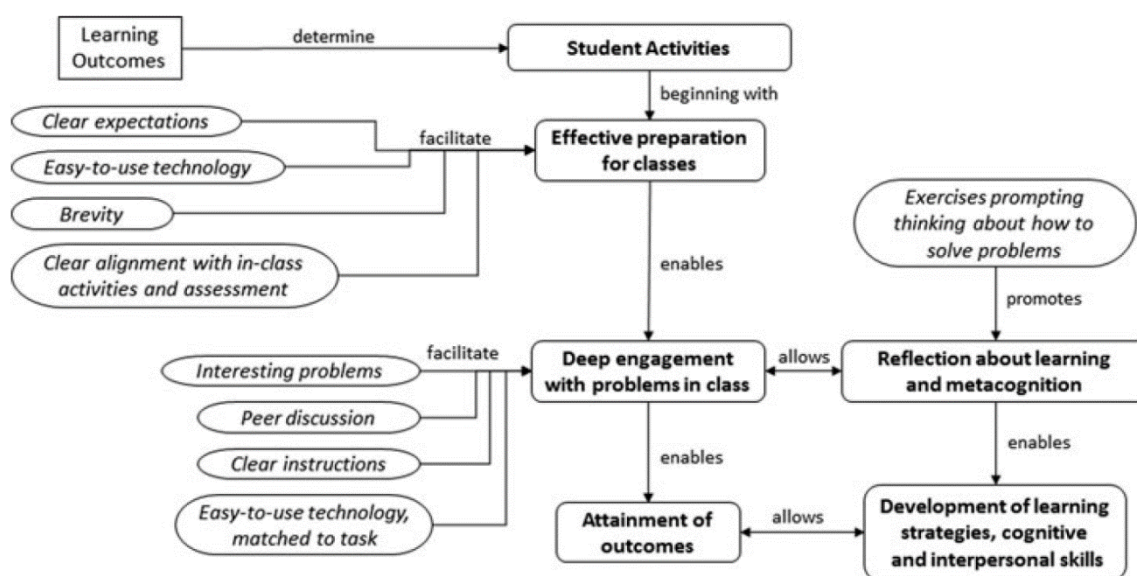
The conception of flipped learning is an effort to make changes in the traditional teaching approach and styles to make it more meaningful from the perspectives of students. This approach anticipates extensive participation from students, along with teachers' support and supervision. Flipped learning is believed to be one of the latest teaching and learning instruction which has the ability to bring changes to traditional methods classes by making them more inviting (Chen, Wu, & Marek, 2017; O'Flaherty & Philips, 2015). Some scholars are convinced that the application of flipped learning has the prospects of promoting active learning which can be stimulating and capture the interest of students to perform in language learning. The concept of flipped learning focuses on the materials or topic provided by teacher before the actual class and requires some preparations from the students for further discussions and activities in classroom. Flipped learning works on a reverse order of teaching where students are required to do some tasks like reading or watching videos before going to the actual class. In the classroom the teacher and students get to use the whole class period for active learning and more interactive activities like discussing themes or concepts of the lesson at a deeper level (Amiryousefi, 2019). It is argued by scholar that the flipped classroom can be an

effective platform for both active and experiential learning theory (Chen, 2021). It is summarized that the flipped classroom pedagogy and its practice has the prospects to increase classroom interactions in obvious ways (Kader, 2020)

Despite the positive perceptions received in regard of the implementation of flipped classroom, it imposes almost equal proportion of challenges for the practitioners, especially teachers. Overall, based on previous review done by Akcayir and Akcayir (2018) on the implementations of flipped classroom, several major problems were identified and addressed by scholars and researchers which have raised considerable concerns and are worth to be discussed in greater extent in order to improvise and enhance the efficiency and effectiveness of using the flipped classroom approach. The discovered challenges are related to time constraints, demand of technology and students' mindset as a whole with many minor issues under the major challenges. It is important to find reasonable solutions for the challenges outlined, so that the teachers and students can pursue flipped learning for a more impactful and interactive learning exposure. The purpose of this review is to particularly focus on the challenges faced by educators whereby most of the studies conducted previously are mostly on the pros and cons or the issues faced by teachers and students as a whole.

### FLIPPED LEARNING

Flipped learning portrays a complex structure of inside and outside of classroom and student management, well-arranged lesson plan and composition of a wide range of study materials to facilitate different parts of the plan accordingly. Flipped learning is a convenient concept at current times mainly on account of the boundless development of technology and its application in educational context. However, being convenient does not imply it is easy to be put into practice. Attributable to its compound nature, carrying out flipped learning can be complicated for the teachers. The teachers' role in flipped learning still outweighs the role of students even though it is considered as student-centered phenomenon. This affirms that, whether in traditional setting or flipped classroom setting, the role of teacher is beyond disputable. In fact, the demand and expectation on teachers' effort in flipped learning is higher compared to traditional teaching method. The concept map of flipped learning by McLaughlin et al. (2016) clearly depicts the crucial role of a teacher in flipped learning (Figure 1).



**Student behavior** is shown in bold; *instructor behavior* is shown in italics.

Figure 1. Concept Map of Flipped Learning (McLaughlin et.al., 2016, 25)

According to the concept map of flipped learning, there are four main components to pay attention to in the process of implementing flipped learning (McLaughlin et. al., 2016). Firstly, the teacher must establish clear set of goals and verify that all the assignments and exercises synchronize with the goals. The second component of the map explains that the teacher is expected to furnish students with necessary information and supply materials related to the topic before the class. The purpose of this stage is to encourage the students to get familiar with the subject matter before the actual class which can be compact and assigned based on the targeted outcome of the whole process. The preparation may involve individual, pair or group work (whichever way the teacher finds fit). The use of technology may appear appropriate at this point. Next is the deep engagement phase where teachers are supposed to elicit deeper engagement from students by presenting more gripping ideas and issues related to the subject or concept that's being discussed where students are inspired to explore further, interact with each other, and try to work on tasks assigned and solve them. This can be achieved with proper guidance from the teacher. This stage is important as it creates an opportunity for students to a more meaningful contextual understanding of the learning or lesson. It gives them a chance to solve problems and promotes critical awareness. The last component of this map is the achievement of students based on the goals set. It is apparent that if the flow of the whole process is smooth and goes as planned, following the structured design as intended and/or desired by the teacher and administered delicately, students will be able to accomplish the targeted goals.

Hence, in reference to the concept map of flipped learning and the elaboration on its components, it is conclusive that although the implementation of flipped learning may be beneficial on many distinguished aspects for students due to its uniqueness and interest captivating nature, the amount of effort required to generate the kind of lessons suitable for flipped learning can be extremely exhausting and possibly overwhelming for the teacher in a long run. As can be clearly seen from Table 1 on the Challenges of Flipped Classroom by Akcayir and Akcayir (2018) from the teachers' perspective, the subcategory (time consuming and higher workload) have the highest proportions of score. Flipped classroom is a concept of going beyond a normal limit for the teachers as teachers are under an obligation to be highly involved and to be always interacting with the students actively. The teacher must determine, design and decide the structure of the whole lesson, facilitate even before and during the lesson with different duties at different stages such as supplying, presenting, teaching, giving assessment, comments or feedback to make sure the objectives of the lesson are achieved. Thus, practicing flipped learning automatically costs more time and energy for teachers in general.

Other than the issue with the time management, use of technology may pose another threat, in the same table, under technical and technological category, quality of videos, inequality of technology accessibility and need for technology competence have higher scores among other subcategories. Technology enables the communication outside classroom which is immensely vital for flipped learning, in the case of technical glitch or occurrences of technological related problems, the concept of flipped learning will not be able to function well or may even be an absolute failure. The said impact however is solely based on the level of dependency the lesson has on technology. Not only with time and technology, but teachers also have a pivotal role in dealing with the students. There are no two students who are the same. Each student is different, and their differences would have influences on their learning styles, behaviour, attitudes towards people and learning, degree of commitment and responsibility. In the direction of dealing with the students with different behaviour and expectations and to ensure the quality of the lesson is not affected in any manner, teachers must develop their coping mechanism to a great extent. This is evident from the score of students' perspective category in Table 1. The teachers ought to be sure of their judgement and give priority to the benefit of the class as a whole and not in favour to a particular individual. Due to its complexity, it may cause a lot of pressure on the teachers.

### **Time Constraints**

Time is an important factor in any form of teaching or classroom settings. Teachers must be able to manage their time exceptionally well to fully benefit from the implementation of flipped classroom. This kind of efficiency is necessary because normally the students are exposed to the topic or subject

of study before the physical class, therefore during the class, students have the privilege to participate in group discussions or pair work to do some brainstorming or collaborative activities which require active involvements of both students and teacher. Based on a study conducted by Wanner and Palmer (2015), approximately 70 percent of teachers expressed broad disagreement that implementing a flipped classroom overall involves less work and time commitment for me than a regular class (face-to-face lectures and tutorials). Although in class activities are focused on the interactions among the students, the teacher must be always available and keep on monitoring the activities closely, taking notes and/or provide guidance when needed accordingly. Also, in class meeting is when the teacher shares additional information on the topic or content to enhance the comprehensibility of the subject which creates chances for students to ask challenging questions. This duty anyhow, can be highly demanding and persistently puts the teacher in loads of pressure between allocating the time to complete the syllabus and responding to students' queries. Teachers must have the capacity to balance their time meticulously and practically to make sure their flipped classroom is successful. It might take teachers with at least a moderate amount of experience in the teaching profession to be able to tackle and run this flipped classroom concept fairly well. An excessive amount of time is needed to be spent on the preparation for flipped classroom (Fulgueras & Bautista, 2020).

### ***Preparation***

Teachers who have their minds on flipped classroom must be consistent when preparing their lessons. Instructors are advised to maximise the benefits of flipped EFL classrooms by taking learners' needs into consideration before engaging in the detailed planning of their courses (Turan & Akdag-Cimen, 2019). First, they must decide on a topic and ways to go around it, choose the appropriate content according to the students' level or proficiency, plan the activities with the right time pace by taking into account the class duration and adapt existing materials or design new teaching/learning materials from scratch. The chosen materials can be in any form as long as it is convenient to use, they include reading materials like articles, audio or video clips and other online resources. Normally, these materials are shared or posted on online platforms for easy access by students at any time and students are expected to read, watch, listen or perform whatever necessary action required to understand the topic or content before the physical class. When preparing the materials, teachers must consider all factors holistically in the benefit of whole class without bias or without ignoring the needs of any student. This can be a very lengthy and strenuous process. Some teachers reported that this model might require more time and workload. Pre-recording video lectures and preparing other flipped model materials is time consuming for teachers (Akçayir & Akçayir, 2018).

### ***Feedback and Assessment***

Ongoing feedback is a key to support continuous improvement; therefore, it generally is given attention in most teaching and learning settings. Since flipped classroom has a distinctive instructional design, it is an additional chore for teacher to come up with assessments which perfectly coordinate with the flipped classroom approach. The purpose of ongoing feedback is to assist the students to identify strengths and weaknesses while helping the teachers to find out the problem areas and for further enhancement. This type of assessments can happen anytime, and it may not be scheduled but often carried out in a casual routinely manner just as part of the lesson itself. For instance, the students may be asked to create a simple mind-map to display their understanding of a topic or to write five-sentence summary of a lecture or to answer a quiz or questionnaire prepared by the teacher.

Assessment planning and designing can be time-consuming but it takes thrice that time to provide feedbacks. Feedbacks are time sensitive (only useful if given at the right time), and the motive is to push the students to do better by knowing how good or bad they are doing in class in the first place. In doing this, the teacher must be careful on not to even unintentionally hurt the students' enthusiasm which can counter back the rationale behind providing feedback. It can be considered as one of the hardest parts of a teaching job as teachers have to deal with students' emotion and attitude when pointing out their strengths and weaknesses. Nevertheless, assessment and feedback also must be planned and carried out keeping in mind the size of class (number of students), nature of the lesson

and the class duration. If it's a one-and-a-half-hour session with thirty students, there probably won't be enough time to give one-one feedback thoroughly. Teacher feedback enhanced many self-regulated learning skills, namely goal setting, self-evaluation, and task strategies, and it also improved students' learning performance (Zhang et al., 2022). Hence, the teacher must find a more practical way to give feedback within the class or to make extra efforts to probably use the technology for assessment and feedback purposes which will definitely consume a significant amount of the teacher's time. In a study conducted by Tang et al. (2017), the authors suggested that "future educators may need to evolve the student evaluation system accordingly when they implement the flipped classroom approach".

### **Technology**

Most classroom in this era are somewhat dependent on technology. It's inarguable that technology does make the teaching and learning process more convenient and faster than the conventional method of writing everything on the board and carrying a few heavy books to classroom. Now, every document, slideshows and books can be saved on the desktop or drive and even better with the internet, everything is just a click away. Most of the time technology is reliable and very helpful but when the technology fails, it can be really troublesome. Flipped classroom involves the use of technology including the pre-class phase. Teachers must have more than just basic knowledge of computer skills in order to handle the class well. Usually, teachers share the materials related to the topic before class on online platforms such as Padlet, Telegram or Google Classroom or some other learning management system owned by the institute. These platforms allow the teachers and students to interact with each other and the students can also discuss and share opinions among themselves. As opposed to the subject of convenience, the catch here is the skill of the teacher.

Barahana et al. (2022) highlighted that the lack of ICT skills of teachers is one of the barriers in the use of technology. If the teacher does not possess what it takes to efficiently make use of the said technology, the teaching and learning process will not succeed. Moreover, teacher must also be well-equipped with the tools that's necessary for the in-class teaching and learning like adapters, hdmi cables, speakers, and projector unless they are readily available in classrooms. Even if the facilities and tools are provided, teachers need to be always cautious. The projector remote may run out of battery or the internet connection can be slow or bad, or the laptop or computer may hang which can result in disorganization and interruption in the lesson. These unpredictable glitches may take forever to fix and that is another major inevitable challenge faced by teachers who are implementing flipped classroom. Teachers often struggle to locate proper technical tools to utilize in flipped classrooms, making learning more difficult for students and leading to teacher fatigue (Bernauer, 2020). Cabanilla and Pogoy (2023) made a point that teachers were upset about the poor internet connection issues and how they badly affected the teaching and learning process.

Flipped classroom approach relied on the extent of the investment by schools in computer resources (Huang & Hong, 2016). Institutes and schools should provide needful facilities and IT support to immediately fix the IT related issues when they emerge to ensure the quality of teaching and learning is not compromised. Teachers can also work at ease and leave the matters to the experts. The management is also responsible to arrange compulsory trainings for their staff (teachers) to make sure they are proficient users of the current technology according to their needs on daily basis. Without proper trainings, some teachers may not be able to catch up with the fast-paced development of technology, let alone to use it efficiently. The competence of using technology may differ according to personality, preference, age or experience, so the trainings should be made obligatory so that every teacher can be expected to use the given facilities and perform at their best, in their own terms and styles. Lack of training will result in poor performance and leave a negative impact in the teaching because a big chunk of flipped classroom relies on the use of technology. According to Nodira (2021), the use of science and technology in improving the quality of flipped classroom is important and there is a solid necessity to come up with latest tools and useful resources to aid its productivity.

### **Student Involvement**

Fundamentally, in any teaching and learning environment, students' involvement brings a lot of difference and impact. Some students may show interest in the lesson and some others may not. There are many reasons behind these two variables including the cultural background of the students, previous experience, level of motivation, prior knowledge, personality differences and mindsets. Most of these things are connected, for example a student from one culture may be used to the "old school" or conventional way of learning which could be as the result of previous experience; the comfort of doing things similarly would affect their mindset that influence their individual preferences when it comes to learning patterns negatively when they are introduced to flipped classroom. Students like this may not be able to perform well or enjoy the liberty shown by flipped classroom concept. On the other hand, another student from the same culture may be able to appreciate flipped classroom because he or she is open for changes. This kind of openness will allow them to fully grab and utilize the fascinating flexibility in the flipped classroom and progress towards success. "This mode of operation relies heavily on students' self-motivated. Some students are not as motivated as others, and this method of teaching may allow those less motivated students to get less done (Shi-Chun, Ze Tian & Yi, 2014)". So, this leaves the teacher with the responsibility to identify, understand and deal with the differences which is not only challenging but also stressful. A study in India by Anbalagan et. al. 2021, revealed that gender, locality, marital status, study year and pedagogy of subject have different impacts on students' attitudes in flipped classroom.

Another interesting finding is that learning interest and prior academic achievement significantly predicted learning experience. Students with high interest in learning showed more engagement and higher satisfaction (Chen et al., 2023), this means students who had better interest towards learning were more active and content in class. It's difficult to clearly categorize the reasons that overlaps in measuring the level of involvement because it differs with individuals, and they are interconnected but the rule of thumb is students' involvements play a huge part in the success and failure of flipped classroom. It takes students who are responsible of their own duties, committed to their work, motivated to learn, willing to participate in multidimensional activities and open to accept new things or approaches to ensure the success of flipped classroom. Unfortunately, it very unlikely to get a classroom full of students who project these top qualities and that's why teachers are supposed to know their students well and are required to plan the class holistically where everyone would gain something.

It is commonly agreed that teachers are excellent in multi-tasking, albeit this degree of expectations could be taxing. Koh (2019) quoted in his systematic review paper that when flipped classroom students had to view video lectures and do groupwork before class, they reported more study burden than lecture-based students even though they agreed that flipped classrooms improved their communication and clinical reasoning skills and it is clear that some students did negatively respond to flipped classroom which affects their motivation level (Tang et al., 2017). Flipped classroom governs a concept where students come to class after doing some pre-class tasks which have been shared by teachers beforehand. This is done so that students already have established a certain level of understanding on the topic and to be able to continue developing some ideas and indulge in deeper discussions with peers that involved higher order thinking skills and to demonstrate what they already know. This stage can be hardly working if students attend the class unprepared by failing to do the assignments posted by teachers, way before the actual class due to lack of interest on the topic or absence of motivation. These students would struggle during the lesson as they don't have prior knowledge on the content, thus making it hard for other classmates if they have to work in pairs or groups because they would not be able to contribute to the discussions. In this circumstance, the unprepared member may be anxious whilst the others might feel frustrated which puts the teacher in a tough position, making it slightly uncontrollable or harder to manage.

When striving through situations as such, it is best for teachers to regulate the plan of action to persuade the academically inclined students and try to administer them closely to increase the benefit of flipped classroom. It can be incredibly demanding for teachers when they are compelled to construct learning modules that contains information and activities appropriate for a large variety of students. Even so, in the view of conducting the flipped classroom successfully, teachers are left

with no alternatives but to put extra effort in designing effective lesson plans and pay more attention to students in need specially to simplify and help in the pre-class phase where the weak or less motivated students normally struggle to understand the content or task. Classroom time originally used for lectures is now focused on activities that foster students' higher-order or critical thinking (Akçayır & Akçayır, 2018; Chen et al., 2017; Lage et al., 2000) through problem-solving and active knowledge application. Although it is complicating for the teachers, it is worth the hassle as the students might be driven to perform better in class after understanding the content with the additional help received from teachers. This can be a breakthrough for the students and might become more accountable in the future considering the personalized support gained from teachers.

## CONCLUSION

The concerns associated with the execution of flipped classroom are largely accurate and valid. Regardless of the negative impacts and difficulties that emerge as a result of using the flipped classroom concept in teaching and learning, it is undeniable that to some degree of interest, flipped classroom approach remains as one of the valuable instructional designs that exists in the context of language teaching and learning due to its uniqueness and flexibility. Therefore, it is vital to take the necessary measures to strategically deal with the challenges, to employ and continue applying the concept of flipped learning in language classrooms. It is rather unfair to disregard the efficacy of using flipped classroom as a consequence of a number of challenges. Instead, the vast potentials portrayed by the scheme, and the benefits possibly obtained by utilizing the flipped classroom concept is worth considering. In accordance with the suggestions discussed earlier on the ways to minimize the adverse points and negative impacts of practicing flipped classroom concept in teaching and learning, it is comprehensible that all the listed challenges have got their solutions. The challenges can be minimized or can be even completely solved in some cases, provided the parties involved give enough attention and priority to address the matters and have the willingness to professionally deal with them. The challenges overlap with one another, making it hard to deal with separately, so the implementation of flipped classroom requires an extensive and rigorous planning and preparation.

It is unfortunate that flipped classroom may not be for all, as it is a complex model with some combinations of strategies and techniques that involve immense use of technology efficiently. That being the case, it requires teachers or practitioners who are diligent, persevering, and eager to learn, gradually progress and ambitious to ensure its victory. It is not suitable for those who are not up for changes or challenges. Ultimately, teachers must manage their time extraordinarily well and set up practical objectives and learning outcomes based on the size of the class, duration of the class and the length of programme or course, the management or schools must provide advanced level of technological devices, tools, software and necessary IT support and trainings for teachers. Teachers must also address issues and actively communicate with the management regarding the limitation and make it clear to the management about their needs. Students most importantly, must be encouraged by teachers and warned by the management to take responsibility and be more accountable in their learning process. Warning from management could help them to realize the importance of following the module effectively and would make them be aware of the consequences of not attending classes or completing modules. Meanwhile, teachers should act as motivators to inspire and provide unceasing support. It is vital for everyone to cooperate to overcome the challenges to continue benefitting by using a dynamic concept like flipped classroom productively to achieve desired outcomes.

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