

FLIPPED CLASSROOM LEARNING A MODERN STRATEGY: AN INSIGHT

Norina Jabeen

Department of Rural Sociology, University of Agriculture Faisalabad, Pakistan
norinajabeen@gmail.com

Huma Afaque

Independent Researcher, Pakistan
humaafaque@gmail.com

Tanazza Sakha

Visiting Lecturer at Bahria University Karachi, Pakistan
tanazzasakha@gmail.com

ABSTRACT

Currently educational research has centred on evaluating major disparities in the educational accomplishments of university students corresponding to the intercession model of conventional teaching and learning techniques contrary to the flipped classroom. These discrepancies have been found to exist between the two models. It has been discovered that the two types of classrooms are distinct from one another in these respects. This empirical study reveals the response of students to flipped classroom learning compared to normal teaching methodologies. The research for this study was based on research that had been done previously. According to the review of several studies that revealed substantial discrepancies on the typical grades obtained by university students, students who participated in the flipped classroom received elevated scores than students who followed a customary methodology. This was true regardless of the specialisation of the course that the students were enrolled in. In addition, the inferences of this investigation point to the conclusion that the flipped classroom approach presents a possibility for the traditional system to undergo a transformation. This could occur because of an improvement in the classroom environment, the teaching-learning process, and the evaluation of the students. This postulation is recommended by the evidence that the conventional scheme could be twisted utilizing the flipped classroom technique.

Keywords: Flipped Classroom Learning, Schooling, Modern Strategy, University Students, Pakistan.

INTRODUCTION

Recent years have seen quick and well-organized shifts in the structure of education systems all around the world. The outcomes of these sorts of reforms will determine the degree to which developed and developing countries are interested in rethinking and introducing novel approaches to the learning and instructing processes. To keep up with the rapid pace of change brought on by the tremendous shifts in the informational and knowledge domains, several countries have attempted to make structural improvements to their instructional methods. Because of these concerns, a broad evaluation of the scholastic systems in most of the countries of the world is required. This leads to the discovery of novel approaches that can enhance and modernize existing teaching practices. These approaches put the student at the center of the educational experience and emphasize the student's personal responsibility for their own learning. They assert that if the teaching and learning settings as well as the instructional tactics are tailored to the capabilities and requirements of each individual student, then all students can learn and advance their level of competence. The paradigm of the flipped classroom is simply one of several modern strategies and methods that are currently available. According to Tully (2014), the flipped classroom is one of the teaching and learning pedagogies that fosters student-teacher interaction using electronic resources. This contact is encouraged by flipping the traditional classroom layout. The use of the flipped classroom approach has the

potential to bring about major changes in educational institutions as well as the environment that surrounds them. The authors Bergmann and Sams (2012) explain that the concept behind the flipped classroom is the idea of conventional learning being completed at home during class time and traditional learning being completed in class at home during class time. In addition, students have access to knowledge outside of class time through technology tools such as films that teachers create to illustrate a specific topic or information that is pertinent to it.

According to Alzwekh (2014), flipped classrooms are a form of modern teaching approach that makes intelligent and entertaining use of cutting-edge technologies to fulfil the requirements of students right now. This method was developed to meet the needs of students right now. The goal behind the "flipped classroom" is to maximize the contribution of modern technological resources to the teaching and learning processes. This is accomplished by moving the learning activities that the students are responsible for from the traditional classroom environment into the homes of the students themselves. According to the definition provided by DeLozier and Rhodes (2017), the flipped classroom is a method of instruction in which lecturing is done outside of the classroom and class time is used for a range of hands-on learning activities. This method is known as the "flipped classroom." In this activity, it is the students' responsibility to read through all the materials that have been presented to them. Students can watch films or other forms of multimedia on their own tablets or smartphones at home or in other locations before attending class under this approach. The instructors are the ones who create the films and any other forms of multimedia that are used. It is strongly recommended that the time allotted for lectures be used for activities such as exercises, activities, practices, and getting help with assignments. According to the definitions provided above, the term "flipped classroom" refers to the process of turning the roles of educating and studying in the lecture hall and at home by utilizing contemporary technological resources for lesson planning and delivery. Traditional textbooks are being phased out in favor of students' own electronic devices, such as laptops, tablets, and smartphones. This allows for a more interactive learning experience. That is, the instructor prepares the resources that will be utilized to explain the new topic to the students using modern audio and visual multimedia as well as responsive appraisal before the session has even begun. The instructor, in this method, acts as both a facilitator and a persuader for the pupils to be taught through the utilization of the materials that have been prepared in advance of the session.

Flipping classroom Technique

According to Nhac (2021), who outlined the methodology behind the flipped classroom approach, the intention was for the teaching and learning processes to be inverted, also known as flipped. Students, for instance, acquire new knowledge when they attend classes in conventional settings. After that, the student travels home to complete any outstanding homework that may have been assigned. Students can learn new content in advance at home using a range of different technological tools and instructional websites that teachers have produced and shared with one another when a flipped classroom technique is implemented. For example, teachers may have their students produce and share a short film that lasts between five and ten minutes. In addition, she or he can promote the flipped classroom by utilizing extra technological resources such as multimedia, social networking websites, educational games, YouTube for Educational Purposes, TED Talks, Khan Academy, iTunes University, or any other educational websites. Asiksoy and Ozdamli (2016) demonstrated that the concept of flipping the classroom can function as a form of student-centered instruction.

By utilizing smart phones or other devices such as iPads, children can actively absorb information about new subjects whenever they choose to do so while at home. Students can better understand the topic by re-watching the instructional videos that are available to them through the usage of various technological tools. In addition, the educational videos can be sped up so that students can skip over the information that they already have a firm grasp on if they so choose. Taking notes is still another alternative to consider. Using the approach of the flipped classroom allows for the personal idiosyncrasies of each individual student to be considered, performance to be improved, boredom to be eradicated, enthusiasm and learning satisfaction to be increased. After swiftly reviewing the course materials, the students dash into the classroom to put into action the information they have picked up outside of class. The teacher starts by assessing the students' levels of comprehension and reviewing what has been studied at home. Next, he or she describes the activities and group question-based ventures that will be carried out in the classroom. Rather than arranging classroom time in passively attending to the teacher's description, the teacher uses

this time to engage the students in active learning. The flipped classroom eliminates the need for students to complete homework at home because the activities that would normally be assigned to them are completed in class. Alzain (2015) demonstrated that the purpose of the flipped classroom is not met by implementing such tools into the various classroom scenarios. As a result of this, it is vital to have a fundamental understanding of the fundamentals or principles upon which an effective flipped classroom is based. These standards are comprised of 1) The student is the Centre of attention in all aspects of the teaching and learning activities that take place within a culture of learning. 2) The instructor will determine the topic that the students will study outside of class to free up time in the classroom for the students to implement what they have prepared. 3) The role of the teacher in a flipped classroom is significantly more significant than it is in a conventional classroom. In the classroom, the instructor is responsible for facilitating additional activities, providing students with timely feedback, and evaluating the students' work.

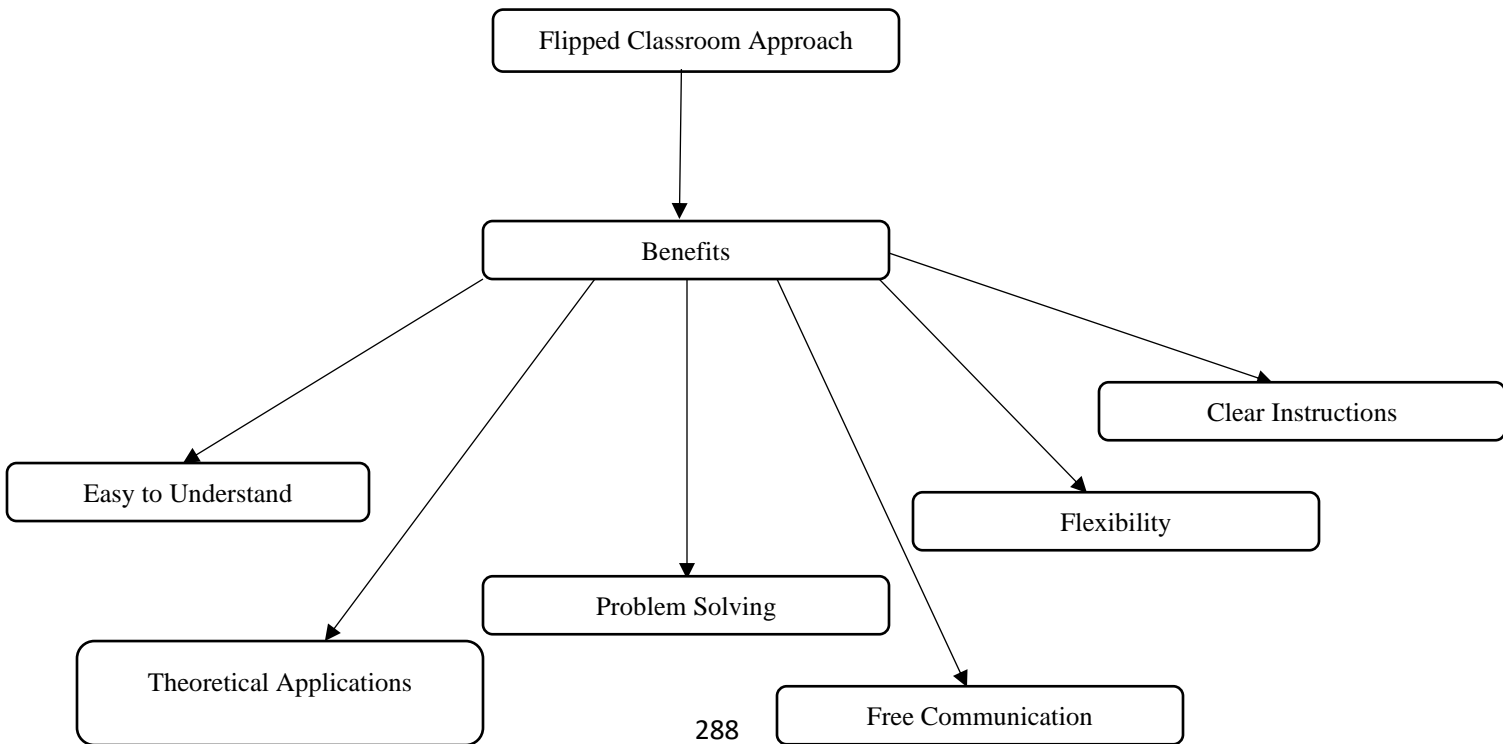
Flipped classroom advantages

The practice of "flipping" a classroom, according to Strohmeyer (2016), has a variety of advantageous effects. These advantages include that a flipped classroom: 1) ensures that teachers make effective use of class time, so that they spend it assisting and guiding students; 2) boosts serious thinking, self-learning, edifice experiences, communication skills, and collaboration among students; and 3) stipulates a way to appraise students' considerate because examinations and brief responsibilities that students complete reveal where they struggle and where they excel in their comprehension of the material. Qualitative data were analyzed using thematic analysis (Braun and Clarke, 2006). For better understanding, the subsequent steps are shown in Table 1.

Table 1. Thematic analysis (Adapted from Braun and Clark, 2006)

Segment	Segment description
Data Familiarization	Data downloading and learning from LMS
Initial codes formulation	Formulation of initial codes during reading data
Theme searching	Amalgamate formulated codes to produce potent themes
Revising themes	Comparison of themes (1-12) levels
Naming created themes	To generate a story effect naming is necessary
Reporting	Produce a concise and interesting report, linked to the research questions

Figure 1. Benefits of Flipped Classroom Approach (Tanner and Scott, 2015)



Additional benefits of flipped classrooms include the following, according to Alshahry (2016): 1) redefining the roles of the lecturer teacher as a chaperon and administrator and the student as an investigator contributing in the schooling and learning procedures; 2) encouraging students' self-learning in accordance with their individual differences and capabilities; 3) creating an engaging learning environment for students; and 4) augmenting high-level discerning abilities such as serious thinking.

The flipped classroom, according to Alzain (2015) is a state-of-the-art technological approach that may be utilized to address students' academic inadequacies and improve the quality of their thinking. Al-Zain emphasized that the flipped classroom method enables teachers to spend more time conversing with their students and less time on rote memorization. When the flipped classroom idea is used in the classroom, kids' intellectual capacities may also increase. This approach gives students the chance to increase their knowledge in the fields of science, practice, and behavioral studies. According to Dickenson (2016), one of the active teaching techniques that enables students to relate what they have learned to their own lives and experiences is the flipped classroom. One of the active teaching techniques is this one. Through this process, the learner will be able to make the connection between what they have learned and the intellectual activities that make up their personality.

Flipped learning challenges

Tully (2014) pointed out that the flipped classroom method does have certain downsides although it has several advantages. One of these issues is that it is necessary for the households of the children to have access to the internet and other forms of technology for this instructional method to work. Because of this, it is challenging for students who do not have access to such equipment to gain from utilizing this scheme. Additionally, it necessitates a ambitious teacher who is eager to keep track of their students' development. For this to be successful, educators need to devote significantly more time and energy. The usage of innovative technologies in the classroom should also be conducted in a professional manner by the instructor. Because of this, the implementation of this tactic may be problematic for instructors who are deficient in either communication or technology talents.

There is a possibility that the educational and learning process will be hindered in some way using digital technologies in the classroom. The deficiency of tools and software for recording and formulating lessons, the inability of teachers to effectively use technology tools to improve teaching procedures, engage students in learning, and communicate with them, and the teachers' insistence on adhering to the traditional method of instruction are some of these challenges. Another challenge is the teachers' insistence on using the traditional method of instruction. However, those teachers can be persuaded if they compare the successful classroom technology use tactics to the traditional approach (Dantas and Cunha, 2020; Newton, 2015; Pashler et al., 2008). Due to the significance of this educational and learning method, the Jordanian Ministry of Education considers keeping up with the most recent educational breakthroughs in a variety of fields of study. It provides educators with the required training they require so that they can implement innovative instructional strategies. The purpose of the training is to help improve the way in which students are given knowledge and to raise the students' motivation to improve themselves in this area. The Education Restructuring for Knowledge Economy Program Project (ERFKE) has been implemented by the Ministry of Education in Jordan. This project lays a emphasis on the importance of integrating communication and info technologies into the teaching and learning processes (Negara). This method can help students develop the necessary qualities, such as scientific and critical thinking, that enable them to be lifelong learners by utilizing a variety of instructional strategies, such as the flipped classroom (Fatemeh et al., 2020).

LITERATURE CONTEXTS

According to a study of older material, the technique of flipping the traditional classroom has been researched in several diverse contexts. For instance, Alzwekh (2014) conducted research at a graduate school in the easterly area of Saudi Arabia to investigate how the implementation of the flipped classroom idea influenced pupils' capacity to study independently. Using the experimental scientific approach, he investigated a group of twenty-six different female students in the form of an experiment. They were able to improve their knowledge by learning new computer skills at home with the help of the flipped classroom concept. According to the findings, the ability of the female students in the experimental group to learn on their own was increasing and getting better. In addition, they demonstrated how the concept of flipping the classroom helped to accommodate individual differences, motivate responsibility, and teach according to

the capabilities of the students. According to the findings of the study, the technique known as "flipping the classroom" ought to be used in some classes, and educators ought to be given instruction on how to include it in their own lessons. Amongst the feminine students attending the College of Education at Princess Nora Abdul Rahman University in Saudi Arabia, Almuaiter and Alqahtani (2014) led an exploration to determine whether the flipped classroom technique is effective in fostering ideas regarding information security among those students.

The sample consisted of one hundred different female students who were majoring in special education. The researchers devised a test to meet the goal of the study, which was to evaluate the level of knowledge had by the students in the experimental group both before and after the implementation of the flipped classroom technique. The findings proved the value of the flipped classroom approach as a means of assisting female students in the College of Education at Princess Nora Abdul Rahman University in better comprehending information security-related issues. The study came to several conclusions and made several recommendations, one of which was that it is necessary to encourage the use of the flipped classroom technique by university instructors and to conduct conferences, classes, and training sessions on how to use this strategy. Almusawi (2014) conducted a study to determine how the flipped classroom technique affects the ability of fourth-grade students to understand geographic ideas and to develop their creative thinking. The study focused on how the technique affected the students' ability to think creatively. The researcher relied heavily on experimentation, one of the most important aspects of the scientific method. For the sake of this investigation, he chose to use the schools run by the Rusafa Directorate in Baghdad as his sample. According to the findings, students who learned using the strategy of the flipped school room were better capable to absorb geographic notions and hone their innovative thinking talents than those students who studied using the conventional process. This was the case for several reasons.

The purpose of Chipp's (2013) exploration was to research the consequences of inverting the traditional classroom layout for the purpose of educating mathematics. A survey was performed on mathematics students at New Jersey University, US, and the survey sample comprised of eighty students. The study was conducted in the United States. The method known as "flipping the classroom" was utilized in the delivery of mathematical instruction to a sample of students who participated in an empirical investigation. The students learned the information by watching videos online at their own pace at home, and then applying what they had learned in class by working together in small groups to solve issues. The second group received instruction utilizing more traditional modes of instruction. The same fundamental mathematical notions were covered in the beginning in both classrooms, but the classroom that utilized a technique known as "flipping the classroom" surpassed the other classroom in terms of the students' performance on exams.

The students in the second classroom were instructed using an approach that is standard. According to the findings of the study, encouraging teachers to utilize contemporary technology in their classrooms could have a positive impact on the students' mental skill development when they are learning about this subject. Another study by Herreid and Schiller (2013) was conducted in the United States. This time, they used a survey of representatives of the National Center for Studying Cases at Teaching Science to confirm that flipped learning is being used in the classrooms of the professors who manage the cases. Two hundred educators discussed how they use the student-centered learning model in their classrooms. They provided several justifications for flipping the classroom, such as the following: 1) ensuring that students have sufficient time to make use of the technology and equipment in the classroom; 2) ensuring that students can engage in activities and watch the lectures that they were absent for. 3) Students are better able to participate in the educational process as a whole and have their ideas reinforced both inside and outside of the classroom when they engage in flipped learning.

CONCLUSION

The significance of this study can be attributed to several different factors that are quite relevant. First, the opportunity to get benefits from the findings and suggestions made throughout the process of designing and implementing the strategy of the flipped classroom in an educational setting. Second, this research contributes toward guiding educators and those who make decisions about education to develop curricula that are in line with contemporary directions in a variety of fields of study, and in the field of education, to

implement contemporary instructional practices such as the flipped classroom. In addition, this research will contribute to the educational literature linked to topics concerning flipped classrooms. This is important considering that the prior literature that was evaluated suffered from a lack of research in this very field.

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