

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

## The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation

Dr. Aneela Alam

Fatima Jinnah Women University the Mall, Rawalpindi, Pakistan.

Email: [aneelaalam92@gmail.com](mailto:aneelaalam92@gmail.com)

Dr. Farhana Khurshid

Fatima Jinnah Women University the Mall, Rawalpindi, Pakistan.

Tanzeela Alam

Fatima Jinnah Women University the Mall, Rawalpindi, Pakistan.

Received on: 13-04-2024

Accepted on: 17-05-2024

### Abstract

The road from implementing the flipped classroom concept in classrooms to incorporating it into teacher preparation programs is called From Flipped to Double Flipped. The objective was to train teachers in order to provide them the information, skills, and competence to implement the flipped classroom concept in real classroom settings before using it in the actual classroom. As a result, a current project was designed to give secondary school instructors a hands-on opportunity to learn how flipped classrooms operate. For this reason, the flipped classroom concept was used to create a double flipped professional development training program. It consists mostly of three phases. The five stages of the ADDIE instructional design model—analyze, design, develop, implement, and evaluate—were taken into consideration during its creation. Initially, a field investigation was carried out to investigate the conditions on the ground. Second, the double flipped professional development training program was created based on the findings, and instructional materials—most notably an e-book—were created in accordance with the program's design. Later, a three-day workshop was arranged as part of the proposed program's implementation. In the end, there were two methods of evaluation. First, the participants of the training program flipped their actual classrooms for one month. Second, a follow-up workshop was conducted again where they shared their personal experiences along with the evidences or sample of their flipped classrooms. Data was gathered twice through conducting focus group discussions with the participant firstly, after the three-day training workshop and secondly after the follow-up workshop again. The findings showed that the participants were overall satisfied with the quality of the Double Flipped PD Training Program. For one month, the training program participants flipped their actual classrooms. Second, they participated in a second workshop where they discussed their individual experiences as well as examples of supporting documentation from their flipped classrooms. The results demonstrated the participants' general satisfaction with the Double Flipped PD

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

Training Program's quality. They were impressed by how well the flipped classroom concept worked as a component of the professional development programs for instructors.

**Keywords:** Double Flipped, Teachers' training, Continuous professional development, Pakistan

## **1. Introduction**

### **1.1 Digital Transformation through Online and Blended Learning**

Moving only with the conventional face-to-face form of instruction is no longer an option in the modern world (UNESCO, 2020). One must reinvent, reorganize, and change oneself in order to survive in the modern world (Gunyou, 2014). ICT proven to be a crucial component of our educational system in these situations during COVID-19 (UNESCO, 2020). In fact, the survival of education worldwide has been aided by the use of ICT, particularly e-learning. Consequently, Web 2.0 technology—which brought e-learning—replaced in-person training (Staker & Horn, 2012). The availability of a vast amount of instructional information at any time and place makes e-learning extremely advantageous (Jahangir, 2020). Online information is always available and can be seen again at any time. Additionally, the online sessions are preserved for future viewing (Hodges et al., 2020). The course materials can then be given as CDs, which ensure that they are also functional offline (Alam et al., 2020). Even though online learning has advantages of its own, in-person instruction cannot be replaced by the medium. Thus it is limited in its own right. In fact, we can replicate it by combining in-person and online learning (Chan, 2010). Under such circumstances, the widely recognized Flipped Classroom educational strategy—which combines in-person and virtual instruction—can be applied (Restad, 2013).

### **1.2 Implementation of the Flipped Classroom Idea**

The classwork-homework paradigm is altered in a flipped classroom by assigning homework assignments that incorporate the instructional material ahead of time and using class time for group projects and practical application of the material. The assignments completed outside of class carry over into the classroom (Overmyer, 2014). The concept of the "flipped classroom" has become increasingly popular worldwide. It has been used to teach a variety of courses at practically every level (Kehoe et al., 2018; Overmyer, 2014). However, the concept is still relatively new in Pakistan. Studies reveal that one of the main causes is instructors' ignorance of the subject matter; after all, they are the implementers, not the practitioners (Fatima et al., 2017). According to Ortlieb et al. (2010), merely introducing new technology into the classroom and assuming that the teachers will use it is an ineffective approach. It is necessary to design a training program that will enable educators to function in a technology setting where cutting-edge methods and approaches are constantly being offered.

### **1.3 The Professional Development Training Programs for In-Service Teachers**

Using information and communication technology (ICT) to enhance the teaching and learning process can be effectively achieved through training. Instructors who collaborate with their peers and receive coaching opportunities for incorporating ICT into the classroom gain greater confidence in fostering and utilizing technology-rich environments. It can have a direct impact on teaching methods if a technologically advanced environment is provided for

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

in-service professional development trainings and coaching as a framework for ongoing improvement (Perez, 2017). It is now the responsibility of the administration to help the teachers incorporate ICT into their lessons so they can receive ongoing support and attempt to put what they have learned into practice during these professional development training programs (Perez, 2017). When practitioners, scholars, and educators are not aware of the potential advantages of a new strategy or technique, they often reject it. Most of them don't grasp its usage or application since they lack the necessary training or understanding (Ortlieb et al., 2010). As a result, it's important to design professional development training programs to potentially overcome these gaps (Kehoe et al., 2018). The professional development of teachers in Pakistan has improved over time, despite being a severely neglected area in the past. These days, a lot of emphasis is placed on teacher training programs, especially for secondary school instructors. because it has become clear that mentalities need to be altered starting in school and continuing all the way up to higher education. Programs for in-service training are created with the goal of preparing teachers for the newest approaches, methods, and strategies. There is always room to equip teachers to use the most recent advancements in real classroom settings as new ideas or models are developed in the educational system. (Saeed & Akhtar, 2017; Mehmood, 2020).

#### **1.4 From Flipped to Double Flipped**

Within the framework of the Flipped Classroom concept, a Professional Development Training Program must be created so that teachers may work with the idea firsthand and then apply it in the real classroom (Minaz et al., 2017). As a result, the Double Flipped concept put forth by Kehoe et al. (2018) is being put into practice. In the Double Flipped Idea, teachers receive training on the flipped classroom by having the training session flipped. Teachers are now prepared to flip their own classrooms after gaining hands-on experience with the Flipped classroom model. While the in-class assignments encourage greater cooperation and participation, the pre-session assignments aid in the promotion of individual study. The goal of the training is to give participants additional chances to socialize and share their experiences with one another while working in groups (Kehoe et al., 2018). Thus, a double-flipped professional development training program was designed, put into action, and assessed in the current study. Given the current research's scope, the following research question was developed:

- How do educators feel about the Double Flipped Professional Development Training Program that offers school teachers in-service training?

#### **2. Purpose of research**

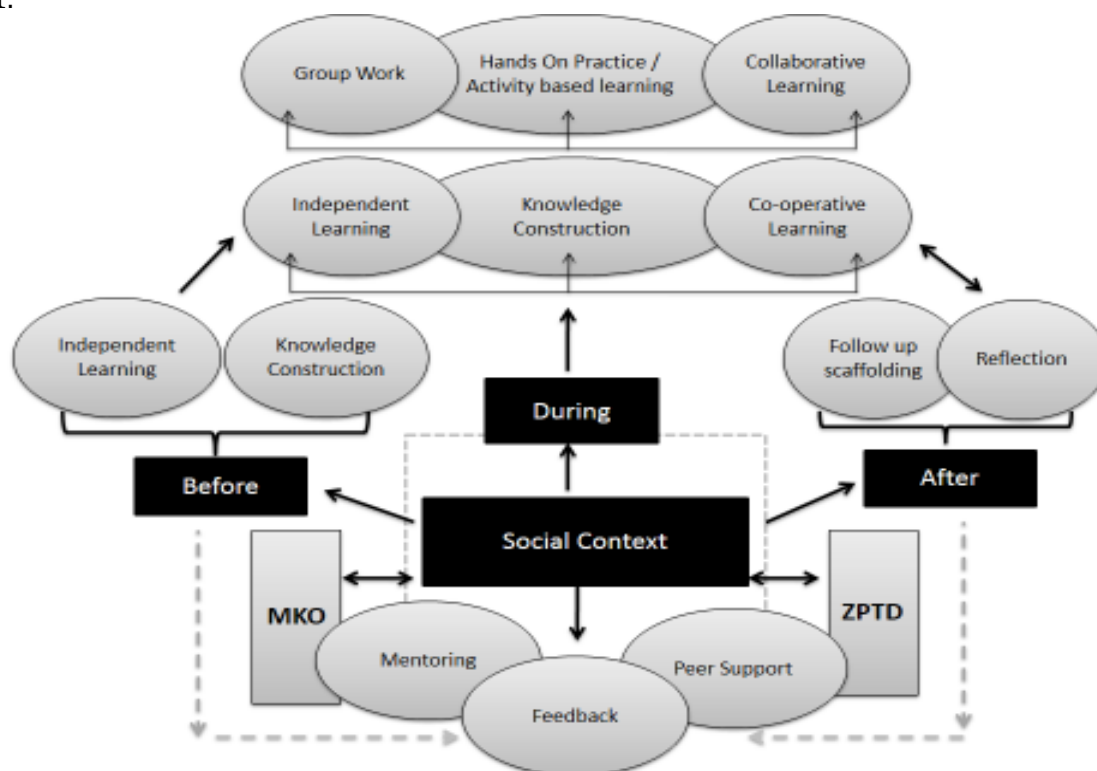
This study set out to create, carry out, and assess a Double Flipped Professional Development Training Program for teachers in secondary schools. The teachers received two types of instruction from this program. For their own professional growth, the teachers first worked in the flipped training session. Secondly, students also acquired the knowledge of flipping their own classes.

#### **3. Theoretical Underpinning and Conceptual Framework**

The social constructivist theory of Vygotsky served as the theoretical foundation for the

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

current investigation. It served as a foundation for creating the flipped classroom-based professional development training program for instructors. The Social Constructivist theory, which backed the use of the flipped classroom concept for teacher preparation, was taken into consideration when designing the conceptual framework. The conceptual framework used to guide the Double Flipped PD Training Program's development is depicted in Figure 1.



**Fig. 1. The Conceptual Framework**

#### 4. Methodology

In order to address the study issues, a qualitative methodology was required. Focus group discussions were used twice to collect qualitative data. First, following the three-day training workshop, participants participated in focus group discussions; second, after the follow-up workshop.

##### 4.1 Participants of the Study

The secondary school instructors were the participants of the study. Rawalpindi Garrison is home to thirty Federal Government Secondary Schools. One secondary school teacher from each school took part in the study as a representative and potential mentor for that institution. Hence, the Double Flipped Professional Development Training Program involved 30 teachers in all.

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

#### 4.2 Procedure of the Study

In the current study, a double-flipped professional development training program was designed, put into action, and assessed with the goal of educating secondary school teachers about the concept of flipped classrooms by flipping the training course itself. In a sense, the Double Flipped was the center of attention since, first, it trained the teachers on the flipped classroom concept by inverting the training session. Secondly, it equipped the educators to also flip their actual classrooms. The instructors returned later for a follow-up workshop, during which they presented the results of their flipped classrooms and shared their experiences. The ADDIE instructional design model served as the foundation for the creation of the double flipped PD training program. Additional information is included in figure 2 below.

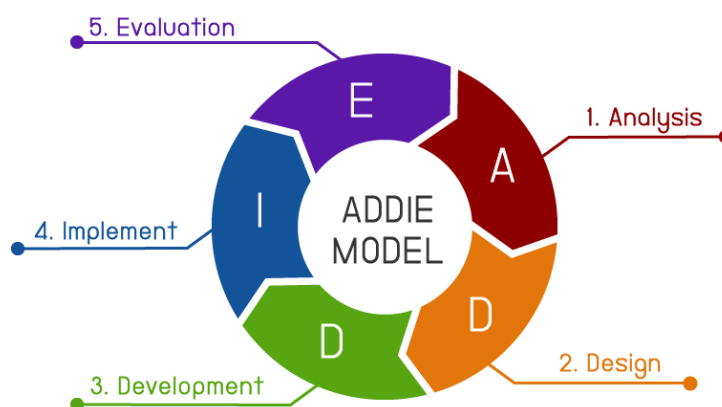


Figure 2 ADDIE Instructional Design Model

A three-day Double Flipped Professional Development Training Workshop was organized with the National Education Policy's teacher education goals (2017). It covers teaching with ICT, classroom management, various evaluation methods, handling individual differences or diversity, and encouraging self-directed learning. Using Flip Pdf, a professional software, an e-book was created to be used as an educational tool for activities outside of the classroom. It included a PowerPoint presentation, a paper, and an instructional video for each subject. The workshop was reversed so that before attending the workshop session, participants had to watch the instructional material. The emphasis of the class then shifted to learning how to apply the concepts. Hence, the teachers got a lot of exposure to work in the flipped classroom. Detail of all three days of the workshop is given below.

The goal of the first workshop day was to provide participants a thorough comprehension of the flipped and double-flipped concepts. A major remark on the requirements and needs of the existing educational system—the “Revolution due to ICT”—opened the day. A thorough discussion of the necessity of incorporating ICT into e-learning and education was scheduled. Next, the concepts of Flipped and Double Flipped were introduced. A lab session was also scheduled for the conclusion of the day to allow the participants to try using the e-book for extracurricular activities. The training workshop was flipped primarily on the second day. Since the participants were given access to the e-book on the first day, they were instructed

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

to watch all of the instructional materials associated with the workshop sessions as homework outside of class. The goal of the training was to provide participants more hands-on experience so they could learn how to apply the concepts in real classroom settings. On the second day of the program, two sessions were scheduled to support self-directed learning and various approaches to assessment. On the third day of the training program, there were primarily three scheduled sessions. The topics of the first two sessions were managing diversity or individual differences in the classroom and classroom management. Focus groups were held at the final workshop evaluation session. With this, the three-day Double Flipped PD Training Workshop ended.

## **5. Findings of the Research**

Following the training of the teachers, the workshop participants participated in focus groups. The nature of the research issue and the necessity of the study were taken into consideration when analyzing the data collected through focus group discussions. Participants in focus groups discussed their opinions about the Double Flipped PD Training Program. The qualitative data was examined using the conceptual framework (shown in figure 1) as a guide. The findings and outcomes are shown below.

### **5.1 The Significance of Social Context**

This section examines the perspectives of educators regarding the importance of social context in the context of flipped learning. It was ensured that the design of the Double Flipped PD Training Program would take into account the context in which learning is to occur. The educators discussed how crucial it is to take the social environment into account when designing a training program that incorporates the flipped classroom concept. They expressed gratitude for how closely the Double Flipped PD Training Program matched their working habits. The reason for this was because the show didn't only discuss current events; rather, it brought notions from fiction to life. A participant stated,

"I discovered that the training workshop's learning environment was relevant to my personal experiences. The classroom setting was excellent for encouraging social contact among students. It was in accordance with our degree of comprehension, interest, and requirements.

According to the participating teachers, the concept of the flipped classroom made it clear that, in addition to the language used, there are a few other factors that should be taken into account when making plans for working with students, including the opportunity for action and reflection, the environment in which activities take place, the psychological connections that are developing among the students, and the language used. They claimed that because they believe the training course to be more contextual, all of this was made possible. Specifically speaking, one of the attendees mentioned the three-day training workshop, saying, "The workshop sessions were according to our needs and demands." It is something we deal with on a daily basis in our teaching practices, such as problems with students' reliance on the teacher, relying solely on end-of-term exams, problems with administration and discipline, etc. Perhaps this explains why we are more interested in it. They discovered that the concepts of flipped and double flipped were extremely applicable to their post-COVID-19 experiences. For them, the flipped classroom model was quite applicable in



*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

Pakistan as well during times when hybrid or blended learning was popular worldwide. One of the panelists talked about how academics used to be quite resistant to blended and online learning. However, following COVID-19, they will need to prepare for the difficulties they encountered. As such, it is imperative to be ready when implementing any new method, approach, or concept. One of the attendees mentioned, We are aware that in the past, academia did not support blended or online learning very much. However, we must acknowledge that this is our only chance to manage our educational system following COVID-19. You never know what's going to happen next. I believe that we ought to be ready for any recent developments in the educational system and embrace them.

**Following the second workshop**, the participants discussed various aspects of the teachers' training program, with a focus on flipping it. They stressed the importance of remembering that no new technology, trend, method, or technique could be used in the classroom unless the teachers were prepared to handle it. They acknowledge that they benefited from this training session in two ways. They were first given an overview of the flipped concept and then given the opportunity to experience it as a learner. Second, students had the opportunity to apply the idea in the classroom as well. "We are the real planners or implementers in the classroom," one of them said. We make decisions on the fly because not everything in the textbook can be applied to our situation. We became aware of how the flipped classroom model contributed to the flexibility of learning as a social activity while we were working in it. We worked through the idea that all classrooms, even flipped ones, had to be built on the idea that classroom procedures ought to mirror social procedures. It should therefore be connected to actual experiences.

In summary, they endorsed the notion that teacher training programs based on the flipped classroom concept can be more long-term successful if they are designed with the context of the learning environment in mind. They liked the idea of Double Flipped since it provided a real-world illustration of how the training curriculum may be more contextual, firstly by viewing the instructors as learners who bring their own social experiences to the classroom rather than as blank slates, Secondly by involving them in classroom activities that are related to the tasks at home and creating a bridge between the home and school worlds, Thirdly by carefully considering the possibility of linguistic obstacles, Fourthly by giving students a chance to socialize with one another both before and during class, Fifthly by establishing a supportive learning atmosphere that encourages more hands-on group projects so students can draw psychological links to tackle the difficulties, Sixthly giving additional real-world examples that are applicable to every single person, Lastly putting the concept forward in a way that makes use of the human and material resources available in that situation.

## **5.2 Role of Most Knowledgeable others (MKO)**

This part talks about what the people who took part in the study thought about the role of Most Knowledgeable Others (MKO) in putting the Double-Flipped idea into practice. In this study, the teacher mostly assumed the function of MKO, but students also filled it on occasion. In addition to sharing his expertise and offering guidance in a variety of educational activities, the teacher also assisted in problem-solving, encouraged peer support, gave prompt feedback, and mentored students. Occasionally, in a group exercise when a more

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

knowledgeable student helped the less knowledgeable learner, the learners also assumed the function of MKO. Participants in the study offered some clarification on this specific Double flipped idea.

In light of their practical experience implementing the flipped classroom concept, the participants believed that multiple people can play the position of MKO. They thought that the teacher acted largely as MKO in the flipped classroom. Since the instructors occasionally take the lead from backstage as well as from the front. The goal was to discover and develop knowledge rather than to teach it to the students. The guidance, support, and encouragement from the teachers allowed the trainees to perform better. They observed their peers participating in a group activity side by side and acting as the most knowledgeable learner. A participant stated,

"This flipped experience teaches us that authorities are not limited to instructors. The students should rely on other persons in addition to him. Being the most informed person does not make one the ignorant of others. Because of this experience, we are more confident now and work harder to perform the tasks that are assigned to us."

The participants in the discussion about the Most Knowledgeable Others' role in putting the flipped classroom model into practice decided that this role comprises peer support, mentorship, timely feedback, and knowledge creation. The following is a list of the participants' individual opinions.

### **5.2.1 Mentoring**

Initially, the participants highlighted MKO's mentorship function while talking about their participation in a flipped classroom. They discussed their encounters with flipped classrooms. At first, they thought it would be like the old-fashioned way of learning anything, which would be to sit there and listen. But in the end, they realized that their mentors aren't simply observing them passively; they're also motivating and pushing them to actively engage in the learning process instead of just absorbing everything. They found it appealing since this teacher training program incorporated the idea of the flipped classroom, in which they received mentor support and were viewed as active learners. An instructor stated,

"We were used to seeing a lone person stand in front of us and deliver his philosophical beliefs. But we also found that the role of the knowing person is to interact with others in a way that enhances their potential and helps them become better versions of themselves.

They are all around us at all times.

They discussed how, in their experience, training program lessons are more likely to stick with them. These kinds of experiences are brought into the classroom by them. If they find the best mentors, they will get advice on how to advise others. One participant believed that, in regards to delivering the concept before the planned class time,

"I think that when implementing the flipped classroom concept, mentorship is essential for in-class activities. I see the chances that come with completing work outside of class to discover that I don't always require guidance and support. But at least give it a shot for yourself. You can discuss any remaining questions with the others and receive their opinions.

After the follow-up meeting, the participants went into further detail about MKO's job as a mentor and emphasized how crucial it is to be willing to impart your professional knowledge,



*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

abilities, and expertise to the learners. Being the most knowledgeable means that you have to lead by example, and kids tend to copy those who are knowledgeable. According to the teachers, their experiences in teacher training programs have left them more receptive to everything that is taught throughout such training. The teachers carry these experiences into the actual classroom. One participant remarked, "It's like what goes around comes around." If we wish to introduce new concepts and enhance learning in the classroom, let's try it as students first.

Another participant commented,

"I usually spend my time with my students in my chemistry class. I offered the students a link to a very instructive movie that they may watch at home to start a conversation about the importance of understanding chemistry. In order for them to share their experiences, I then offered them a worksheet to finish in class. Whenever they experienced uncomfortable situations, I was there to assist them in getting out of chaos."

In conclusion, participants viewed mentors as role models. They believed that students frequently copied their mentors and role models. You should not treat your students as empty vessels as a mentor; instead, you should conduct yourself with more professionally. According to them, a mentor's role is to develop students' intrinsic skills and provide support, direction, and help so they can realize their full potential. The Most Knowledgeable Person, according to them, should help others reach their greatest potential, support them in addressing problems, and help them become more capable of learning on their own.

### **5.2.2 Assist in Knowledge Construction**

New information is created through interaction between individuals and groups. Participants in the study provided in-depth explanations of their perspectives on the role of MKO in knowledge creation. According to the participants, it's critical to keep in mind that students don't enter conversations about knowledge building with blank slates. They are contributing an abundance of knowledge and experiences. Teachers have admitted that the idea of the flipped classroom has really provided them with an opportunity to begin building their knowledge through tasks that are performed outside of class. New information was provided based on some past knowledge or experiences. Specifically regarding the workshop, one participant said,

"The new concept is easily assimilated into our existing understanding. In fact, we had an easier time remembering our previous experiences because of the pre-session activities. Throughout the lesson, we speak with our teachers and other students to further verify the material."

The participants expressed significant appreciation for the increased chance for individual exchange of pre-constructed knowledge during the flipped classroom. Now, during the flipped classroom session, that knowledge was co-constructed through social interaction and the instructor's assistance. Rather of accepting or rejecting the notion, the most knowledgeable person in this situation—a teacher, instructor, or peer—had to examine, simplify, and clarify it in order to further educate the students. It is the duty of the teacher, trainer, and instructor to ensure that the tasks done outside of class are related to the students' previous experiences. It should be easily understood, visually appealing, and relevant to the social context so that they can make the connection between the new

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

knowledge and what they already know very quickly. Under the guidance of the instructor, one of the participants said,

"The in-class activities are a platform to verify/authenticate the knowledge that has been presented before the session."

After the follow-up meeting, the participants talked about how MKO's role in a flipped classroom is to support students in creating new things by assisting them with the topic's discussion, clarification, exploration, explanation, and simplification. One participant said,

"This is exactly the same text that was written in our course textbooks ten or fifteen years ago." because spreading the knowledge that already exists—rather than producing new knowledge—is our top focus.

A different teacher said,

"The role of a teacher in the flipped classroom should be that of a facilitator and a guide, who promotes discussion among the students, provides an opportunity to reflect upon their thinking, links the new knowledge with already existing knowledge, and supports collaborative activities among the learners."

This assertion elucidates the function of an educator in the process of creating knowledge. In conclusion, the flipped classroom was perceived by study participants as a process where knowledge is created. They claimed that at first, when the training materials were assigned outside of the classroom, it was simpler for them to make the connections between the new information and what they previously knew. As a result, their knowledge base received some updated information. Later in the second stage, during the flipped classroom session, they interact, communicate, clarify, and explain their views to one another. As a result, the recently obtained data was created and mutually confirmed. The participants expressed great appreciation for the instructors' and teachers' proactive support of the students in both phases.

### **5.2.3 Feedback**

The study participants discussed their opinions about MKO's function in giving feedback in flipped classrooms during the focus group talks. They talked about their own experiences participating in various group activities throughout the flipped session. They were able to participate in group projects and work with their peers because of the instructor's prompt comments. They mentioned that the teacher always gave them extra energy to work, motivated them, and gave timely feedback to help them stay on task while they were starting a new assignment. The relevance of the in-process feedback was acknowledged by the participants. Since learning is a process, the student should receive feedback at every turn. They agreed that learning is similar to building a structure. Every brick layer has a specific function when building a wall. Feedback holds bricks together like cement. It is crucial to provide prompt, in-the-moment feedback. After the process is completed, making modifications suggestions is not very important.

The study participants discuss the significance of feedback in the context of flipped classrooms, emphasizing the need to connect assignments completed outside of class with classroom activities. The learning challenge presented in the instructional material introduces a new idea to the student. For him, it's an entirely new experience. He therefore needs some direction to determine whether or not he has understood the concept. In that

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

scenario, the instructor should give the student time to consider the assigned job as soon as they enter the classroom. They express the opinion that in order to help students overcome any uncertainties or misconceptions, a discussion of the subject should be started first, followed by feedback. Prior to proceeding with the application, which is the second step, it is crucial. As per one of the participants,

"Getting the right understanding about the concept is important before its application,"

**Following the follow-up workshop**, the teachers clarified why it's crucial to execute the flipped classroom strategy by consistently connecting the assignments completed outside of class with the in-class activities. They noticed that when the student receives the instructional material as a homework assignment, it is an entirely new experience for them. He needs the expert's assistance in order to comprehend and make sense of his ideas. In this situation, the instructor ought to begin class by considering the assignment that the student was given. The manner the lesson began with a question-and-answer period and some scholarly debate was well-received by the participants. The teacher then gave the students feedback to help them clear up any confusion or misunderstandings. A participant stated,

"Before putting a notion into practice, it's critical to grasp it fully. In order to address their questions and clear up any misunderstandings, I made an effort to include my students in a question-and-answer period during my Islamic Studies lesson."

Since the teachers learnt about the implementation of the flipped classroom during the flipped training workshop, where their workshop was flipped, the teachers saw the Double Flipped Training Program as a very valuable approach. Following that, they had another chance to receive comments on their work at a follow-up session. One of the teachers commented,

"I must appreciate how the trainers assisted us with their timely support, guidance, and feedback throughout this training program,"

The training program's participants expressed confidence in the program's ability to help them in the future. It was called the Double Flipped Professional Development Training Program. since learning is still a relatively new process. As one of the teachers put it,

"It was just a spark, just the beginning. Now, there is still a long way to go. As we were able to progressively grow, thanks to that training program where we received feedback on our learning."

In summary, the participants resoundingly agree that the flipped classroom concept facilitates timely feedback delivery. They liked the concept of "double flipped," in which additional opportunities to apply the flipped concept in real classrooms were offered following training on the subject. They mentioned that they will be able to collect input on the product as well as during the process because of the Double Flip. They did, however, feel that providing feedback as a product is not as important as providing feedback during the process.

#### **5.2.4 Peer support**

The peer/colleague and the instructor/teacher both take on the role of MKO in a flipped classroom. The teachers expressed their appreciation for the way the flipped classroom operates, pointing out that group projects and hands-on activities encourage greater interaction among the students. As they work on the group assignments, the students help,

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

mentor, and encourage one another to achieve their shared objectives. Speaking specifically of the flipped classroom concept, the participants revealed that a great deal of emphasis has been placed on individual contact. According to them, a teacher's job is to give students opportunities by getting them involved in a variety of group activities, which allows peer teaching to occur. During a firsthand account of her work in a flipped classroom, one of the participants stated,

"When we discuss the task among our colleagues we easily grasp the idea."

Concerns about the flipped classroom model, which encourages greater student contact in order for them to assist and support one another in their learning, are also expressed by the teachers. They claimed that giving students a group assignment and assuming they will support one another without closely monitoring them can be deceptive. Because they are aware that others will do the assignment, some students might not collaborate with one another or they might just sit there. Then, it is possible that the most knowledgeable student lacks effective communication skills, which lowers his confidence level as well. One participant made the following suggestion,

"Teacher support should always be provided in addition to peer help. We have to make sure that we are available to our students at all times."

Following the second workshop, the educators emphasized once more that a student, a peer, or a coworker can assume the position of MKO in the educational process. It has been stated that each person is unique. There may be a mix of more and less knowledgeable students in every classroom. They also acknowledged the indisputable value of peer assistance in the educational process. Speaking specifically about the flipped classroom, the participants revealed that it places a strong emphasis on interpersonal connection. They claimed that a teacher's job is to give students opportunities by getting them involved in a variety of group activities, which allows peer teaching to occur. One of the Pakistan studies' teacher said,

"Students from various backgrounds interacted with one another in groups as I taught the notion of cultural diversity in my social studies course. They exchanged cultural knowledge with one another. Students learned from one another and the classroom became more engaging as a result. It ought to resemble a hierarchy in which teachers help the more capable students, who then help their fellow students."

Another physics teacher added,

"In my physics lecture, there were a few points of vector quantities that some of my students did not understand. I therefore made the decision to put students in mixed ability groups and give them an assignment. They were helping each other, I noted."

The teachers concluded by sharing their own experiences from the three days of the flipped training program, which gave them a chance to engage with a variety of people. To dispel any misunderstandings, they first discussed their outside-of-class assignments with one another. Second, with the help and encouragement of their peers, students collaborate to finish the assignment during the flipped session. On the other hand, they recommended that close instructor supervision should always be paired with encouragement for peer teaching.

### **5.3 Zone of Proximal Teacher Development (ZPTD)**

Warford (2011) established the concept of ZPTD, or the Zone of Proximal Teacher Development, in relation to the development of teachers. "It is the gap between what trainees

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

can accomplish on their own and the highest level they can achieve under the strategic mediation and guidance of an expert in the field," according to him (Warford, 2011. p. 253). The study's participants expressed their opinions on how the Double Flipped PD Training Program helped teachers achieve ZPTD. In regards to flipping the training program, educators felt that a teacher is a more knowledgeable collaborator. He ought to recognize the requirements of the educators and offer them the chance to learn under the guidance of a more experienced instructor for a less experienced student. One of the participants said,

"Our teachers help us to get out of situations where we feel stuck on a task or are unsure about a concept. We completed the chores that we could not have completed on our own with their meager assistance.

The teachers thought that in a flipped classroom, it was crucial for students to interact with one another in order to realize their full potential. They affirmed that speaking with the many subject matter experts was a positive experience. As they worked in groups, they made use of each other's potential. The educators discussed how they were helped to realize their immediate potential. They revealed that putting the Flipped Classroom concept to use in teacher preparation helps teachers reach their full potential. They went on to say that it's a good idea to assign the instructive material as an after-class assignment to get students thinking. This is the initial phase of education. After they grasp the fundamental idea, class time may be utilized for additional explanation and application of the idea while being supervised by the Most Knowledge Other (MKO). One of the participants stated,

"The separation of in-class and out-of-class time helped to first understand the concept through self-exploration, then further learn to implement it under the guidance and support of the instructor,"

Following the second workshop, the educators agreed that in creating a flipped classroom, collaboration is essential to enable others to realize their full potential. The study's participants valued the numerous chances for interaction and mutual learning that were offered during the training course. Their interactions with the many subject matter experts were deemed positive by them. In particular, the participants remembered from the training session that they were able to utilize each other's abilities when working in groups to complete any task. They went on to say that this training experience taught them how to give the students lots of opportunities so they could engage with one another more. During his personal account of participating in the Double Flipped PD Training program, one of the participants stated,

"I investigate the significance of learner interaction. One person's strengths might compensate for another's inadequacies. To give one example, I have been a teacher for eighteen years. Because of my limited experience with modern technology, my coworkers were a huge help in getting me ready for the follow-up workshop presentation."

In conclusion, the study's participants acknowledged that teachers are becoming increasingly dependent on one another as a result of the conventional training model. They understand they will arrive, pay attention, and leave. Regarding their current experience, they said they learned the importance of being ready for in-class activities when the instructional content was assigned as a homework assignment. They admitted that throughout the class, they shared some notions with the peers or the instructors that they didn't fully comprehend. Additionally, the group work helped to dispel any doubts or ambiguities they had. The



*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

necessity of follow-up scaffolding and reflection in enabling a beginning to experience PD under the guidance of an advanced partner was also discussed by the attendees.

### **5.3.1 Follow-up Scaffolding**

Scaffolding was seen by the participants as a component of the ZPD. They define it as a process in which a student receives direction and assistance from a more experienced individual in order to help them realize their full potential. When discussing the concept of a flipped classroom, scaffolding was typically seen as a "Follow-up" activity. The participants recalled how the concept of the "flipped classroom" encouraged social contact amongst students while assigning them group projects. Having each other's back made it easier for them to collaborate. One of the participants stated,

"It is human nature that he wants to interact with others who have more knowledge than they currently have in order to learn."

They liked the concept of assigning the instructional material as a pre-class assignment and using class time as a scaffolding for follow-up to further explore the Zone of Proximal Development. One participant, though, stated that,

"Just having the material available before class is not enough unless and until additional support and guidance is given to relate it with in-class activities."

The participants in the follow-up session acknowledged that professional development takes time. It takes a lot of time to complete. It takes time for a trainee teacher to put their newly acquired knowledge and skills to the test in a real classroom. They were grateful for the assistance in applying the Double Flipped concept to their actual classroom applications. They claimed that this training program gave teachers the chance to apply and practice the concepts in the real classroom, in addition to simply imparting new ideas into their heads. Such follow-up is necessary in order to test the newly acquired knowledge. Only then will it be able to advance one's career. As per remarks of one of the attendees.

"I like the idea of a follow-up workshop after providing teachers some time to flip their classrooms."

The participants clarified that in the flipped classroom, numerous opportunities were given to complete the formative and diagnostic assessments rather than depending solely on the final exam for example, the homework assignment at home and the class discussion aided in the formative or diagnostic evaluation. Afterwards, while the class was working on the group assignments, the students' performance was also evaluated. Scaffolding was available alongside each assessment along that process. The participants recommended that the in-class exercises be viewed as supplementary assistance for assignments completed outside of class. Instructors like giving students access to the material ahead of time and using class time for additional scaffolding to assist them get to the Zone of Proximal Development (ZPD). One participant, nevertheless, stated,

"I usually give the children a worksheet to do after seeing the relevant video. My class then began with a discussion on it, during which I usually respond to their questions. Since, I think that simply having the material available ahead of time won't be sufficient unless additional help and direction are given to help connect it to in-class activities."

In summary, the research participants conveyed that the Double Flipped PD Training Program offered a framework for scaffolding to take place as a subsequent task. They agreed



*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

that the concept of the flipped classroom enables students to consider, investigate, inquire about, and consider the material on their own first. After then, with the assistance and direction of the Most Knowledgeable Others, class time is devoted to further clarifying, elaborating on, debating, describing, and applying the material to the solution of real-world issues.

### **5.3.2 Reflection**

The study participants expressed their opinions about how the Double Flipped Idea offered numerous chances for introspection, which led to a gradual transition towards the Zone of Proximal growth. They mentioned that they thought a key element of the flipped classroom concept was reflective practice. Giving students homework based on the lesson material aided in their reflection on prior learning. That led to the acquisition of new information. One of the participants stated,

"We reflect back upon what we already knew and try to relate the new knowledge with the previous one,"

The teachers expressed that they thought it was a good idea to have a discussion and Q&A session before class. It was quite beneficial to reflect and evaluate oneself. They understood that a student would be able to determine how much he has already learnt and how much he still has to learn from this. Students were then given additional opportunity to reflect on their prior classroom experiences by using class time to investigate ways to apply the concepts in real-life scenarios. They said that having a setting like this encouraged people to learn from one another more. As per one of the participants,

"Previously, we observed that reflection happened at the end of the process. We now understand that it is a process in and of itself."

The study participants expressed further approval of the training program's three-phase structure during the follow-up session. They thought it was a great idea to offer training in the first phase, flip the actual classrooms in the second phase, and then return for a follow-up session at the conclusion. They said that as they progressed under the guidance of the instructor, each phase assisted them in considering what they had learned. A participant made the comment,

"It felt like a ladder."

The training program participants indicated that they made an effort to provide their students several chances to reflect on what they had learned. It aided them in evaluating themselves. The professors went on to say that they always made sure to connect the assignment from home with the one from class. Every class started with a question-and-answer period so that the students could connect the new information to what they already knew. Different group assignments were then given out. The students discussed and evaluated what they had learned while working in groups and exchanging insights. One of the teachers said,

"I let the students reflect upon what they already know about their respiratory system before watching the video about plants' respiratory system. They discussed what they had already learned in the eighth grade the following day. I then asked other questions concerning the video after that. At that time, they attempted to distinguish between the respiratory systems of plants and humans."

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

In summary, the individuals believed that reflection was an equally important process before, during, and after the flipped classroom. They agreed that teachers should prioritize reflective behaviors over those of students. They were grateful for the opportunity to reflect on their accomplishments and look forward to reaching their full potential by using the Double Flipped Idea for Professional Development training. They did, however, think that in order to give teachers this kind of opportunity, a learning atmosphere must be established. At that point, they will endeavor to enhance their own teaching methods.

#### **5.4 Support Independent Learning**

The participants discussed how they believed the double-flipped concept promoted independent learning. The teachers that took part in the flipped classroom agreed that it gave them the chance to set the learning pace. They mentioned that having the material assigned as a pre-class assignment allowed them to study at their own speed and convenience. Working alone, they attempt to investigate the idea. They reflect on past experiences, pause to consider again, and accept accountability for their own education. They said it worked well for them because they could read the text and view the video whenever and wherever they wanted. A participant stated,

"I liked how adaptable the flipped classroom concept was. It's not like you have to sit there and take notes all the while; you can start, stop, search, pause, and resume at any time."

The participants did, however, also agree that, in addition to encouraging individual learning, a conducive learning atmosphere must be established. Given their greater knowledge, the job of instructor or teacher is crucial in this situation. They believed that he ought to offer direction, assistance, inspiration, encouragement, and learning motivation. The learner should be encouraged to take charge of his own education rather than being spoon-fed. One of the attendees mentioned,

"It places a great deal of responsibility on the learner because we couldn't benefit from it if he wasn't motivated or willing to learn something new."

The teachers believed that it is critical to teach our teachers how to learn on their own. They acknowledge that educators themselves are accustomed to receiving training in a setting that does not value their independence as learners. The participants also expressed their worries about encouraging self-directed learning. They believed that using the concept of the flipped classroom to train instructors would be beneficial, but in the context of implementing it in the classroom, encouraging independent study could place a lot of pressure on the students. For a little while, we could, for instance, reverse the training session. However, it can be difficult to flip the classroom for several disciplines or courses. Because they must do the pre-class assignment on their own and be ready for any talks or activities that take place in class, students might not be able to handle the strain. One of the teachers asked,

"What about flipping multiple classes at the same time? It can be difficult at times!"

After the second workshop, the teachers expressed their expectation that training teachers to be self-sufficient learners is essential, mentioning in particular the Double Flipped Professional Development Training Program. They recalled that the educators are accustomed to receiving instruction in a conventional setting, where they are not seen as self-sufficient learners. Teachers who took part in the Double Flipped notion were grateful for the two ways it led them. They first learnt how to operate both individually and collectively

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

throughout the three-day training course. Secondly, they also instill these practices in their students when they flip their own classrooms. As a result, they have the opportunity to put what they have learned into practice. As per remarks of one of the participants, "My students were therefore given a homework assignment to view the film and make a list of all the key elements. It was requested of them to be accountable for their own education." The educators went back to their earlier belief that the students were accustomed to being spoon-fed. As a result, preparing kids for independent learning will take longer. They might abuse technology or squander time viewing unrelated online information. The students are content with the conventional system because of their dependent character. Thus, it takes a great deal of skill on the part of the teachers to monitor them and maintain communication with their parents or guardians to ensure that they are on the correct path. The participants did, however, also mention that the kids found it appealing to be able to view educational videos at home as much as they pleased. They also valued the use of class time for a variety of activities. Students stated that in order to understand how to apply the concept in the classroom, they needed to engage in hands-on practice as well as group projects. A participant related his personal experience,

"I think slow learners would really benefit from this idea. The concept of watching videos at home appealed to my students. They were more eager to work in groups during class." Finally, the participants discussed using the Double Flipped concept for professional development for teachers. There are two ways that training functions. It first teaches teachers to be self-reliant learners by allowing them to take charge of their education, complete pre-class assignments at their own speed and convenience, deepen their comprehension through discussion, and participate actively in class activities rather than just watching and listening. Second, by flipping the classroom, teachers may encourage their students to become more self-sufficient learners rather than relying solely on them.

### **5.5 Group work**

The study's participants discussed how they believed the double-flipped concept aided group projects in the educational process. They revealed that they were urged to organize study groups for both in-class and extracurricular activities when training was delivered by flipping the training workshop. Some participants mentioned that they had other obligations that prevented them from interacting with others during the pre-class assignments, but they found it more beneficial to work in groups during the session or class. With the support of their peers and professors, it enabled them to solidify their comprehension. They attested to the fact that they engaged with others in the group, supported one another, and provided additional inspiration and drive to complete the assignment. A participant stated,

"It made me the owner. I was aware of my role in ensuring our success."

Overall, the participants loved the Double Flipped concept and agreed that it ought to be included in teacher education programs since it provided real-world experience applying the ideas. It promoted group projects where peers and trainers offer assistance. They revealed that they first participated in the group activities that advanced their comprehension. Additionally, it taught them how to support students' development through group projects. Additionally, the study participants discussed the two key elements of group work: the first is transitioning from cooperation to collaboration, and the second is the practical experience.

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

The specifics of the participants' opinions are detailed below.

**5.5.1 From Co-operative to Collaborative Learning**

The study's participants discussed how they believed the double-flipped concept encouraged cooperative and collaborative learning strategies through group projects. They mentioned how working in groups helped them learn a lot while experimenting with the Double Flipped concept. They valued how the separation of pre- and in-class assignments promoted cooperative learning initially before shifting to a more collaborative learning environment. Initially, individual work was supported during the flipped training workshop. They have provided an example of a pre-class assignment here. They claimed that in order to understand the key ideas, each student must use the provided e-book alone at home. Next, links were made between the pre-class and in-class tasks. They remembered trying to study the content and watch the instructional video in order to get ready for the group talks the following day. A participant proposed that the pre-class task be administered in groups as well. To create a summary, each participant must watch the relevant portion of the instructional material on their own at home before sharing or discussing it with the group. One of the participants mentioned,

"We couldn't sit passively watching others to do the task but we were encouraged to focus on the individual task that contribute in the group task at the end."

Following the **follow-up** session, the attending teachers discussed that group work is not meant to provide an opportunity for lazy learners who can depend on others. Rather, group work ought to promote the growth of responsibility in each group member. As a result, the participants' group task distribution in their flipped classroom functioned effectively. One of the teachers stated,

"I noticed that some students were taking negative advantage of the group work in my Biology class. They attempted to rely on the other group members and gave the impression that they were preoccupied with their duties regarding the osmosis process. I requested that they assign each member an equal portion of the task. They then took a more active part after that."

The teachers talked about their own experiences taking part in the Double Flipped Professional Development Training Program, saying that it taught them how to work with others to coordinate and solve problems through cooperation. They were therefore able to instill these habits in their students as well. However, a small percentage of participants preferred cooperative learning over collaborative learning. One of them expressed the opinion that simply giving students a group project is insufficient because they are not accustomed to it at the school level. Instead, assign each student a role in the work to ensure that they are all actively participating in the group. In summary, the attendees discussed how cooperative learning fosters cooperation the most. They discussed their own experiences with the Double Flipped and explained that the purpose of group work was not to encourage working alone on a subject. Rather, they must first fulfill their individual role as a group member and finish their own assignment, work together to complete the group assignment by interacting, sharing, discussing, and coordinating with others.

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

### **5.5.2 Hands-on practice**

The participants mentioned that knowledge construction was given a lot of attention when dealing with the flipped idea. They believed that the pre-class assignment, which included educational materials, just served as an overview of the subject. The goal of the following day's activities was to participate in various interactive problem-solving exercises and get new insights from one another's experiences. A participant who described how he found several opportunities to practice the concepts gained in the Double Flipped Training Program, said.

"Here, I personally experience the application of the quote; I do and I understand."

The majority of participants primarily connected group work with practical experience. They agreed that we need educators who can support activity-based learning in the classroom and collaborate well with other educators. They acknowledged that the majority of teacher preparation courses are lecture-based. The goal is to impart knowledge from the educator to the trainee alone. As a result, educators are ill-equipped to facilitate group-based, hands-on learning in the classroom. The teacher valued that the Double Flipped PD Training Program gave them several chances to learn the ideas by working in groups to complete various activities and said,

"I have gained the self-assurance to collaborate with others, support experiential learning in my classroom, and learn how to overcome obstacles."

The participants in the follow-up workshop noted that the majority of teacher preparation programs are lecture-based. Their primary goal was to impart knowledge from the trainer to the learner. As a result, educators lack the assurance and knowledge necessary to encourage experiential learning in the classroom. The Double Flipped Professional Development Training Program gave the participants several chances to do various activities in groups, which they valued. As one of the participants recalled,

"I learned how to encourage hands-on learning in my classroom and I gained confidence to work with others." When the students conducted experiments to investigate the role of the Xylem Vessel, for example, they shown a great deal of curiosity.

One participant, nevertheless, voiced her reservations about encouraging activity-based learning in the classroom. She says,

"It required a lot of time. What about the material we need to finish on time? How about the set of tests? How are the grades coming along? We truly wish to. However, we must first get administrative support."

The study's participants concluded by sharing how numerous chances for hands-on learning were made possible by encouraging group activity. Their self-assurance level rose as a result, and they gained practical experience to meet obstacles head-on. Additionally, they made a solid case for the administrative backing needed to implement these ideas in the classroom.

### **6. Discussion and Conclusion**

It has been discovered that this double-flipped professional development training program works well for giving secondary school teachers instruction in a variety of methods. The results showed that because the training program was designed with the learning environment in mind, it was beneficial for the teachers participating in it. After COVID-19, blended learning was implemented based on the needs and expectations of the learning



*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

setting, as well as the students' level of knowledge. The study's conclusions are consistent with those of Lee (2007), Ortlieb et al. (2010), and Beglau et al. (2011), who have all emphasized the need to customize teacher preparation programs to be more contextual in nature in order to adequately educate our teachers to teach in the technologically advanced world of today. It was discovered that social experiences were also prioritized by the training program. Efforts were made to address language obstacles, provide participants chances to socialize before and during the session, use analogies from everyday life, and communicate the idea in a way that made use of the material and human resources that were available. It enabled participants to use the resources at their disposal to flip their own classrooms. This conclusion was further supported when it was discovered during a follow-up session that creating a flipped classroom required very little money and could be executed with items found in everyday life. The findings that instructors are more satisfied with their training programs when they believe the concept can be implemented in a real classroom setting with the resources at hand were corroborated by Khaliq et al. (2017). The qualitative data examined how the participants associated the idea of Most Knowledgeable Others (MKO) with both their instructor and peers. It has been discovered that in the Double Flipped PD Training program, in addition to peer and instructor assistance, a more educated learner is required. A teacher's job is primarily that of a mentor, counselor, and supporter. It has been discovered that this training course helped the educators understand how to take on the position of mentor in the flipped classroom. The participants were impressed by the instructor's guidance in helping them become autonomous learners and realize their full potential while working in a flipped classroom. The qualitative results showed that providing participants with educational materials prior to the session aided in their development as independent learners. They formed connections, drew on past experiences, and created new knowledge. Working together in groups, participants co-constructed knowledge throughout the program. The results are corroborated by Sams and Bergmann (2012), who highlight how peers can also play the role of the most informed person, in addition to instructors. The same conclusions are shared by Enfield (2013), McGivney-Burelle and Xue (2013), Turan and Goktas (2016), and others about the flipped classroom: giving students access to material ahead of time encourages responsibility and motivates them to learn.

Regarding the feedback component of the flipped classroom, research indicates that the Double Flipped concept offered a way to apply the principles taught in real classroom settings. When the participants returned for a follow-up workshop, it offered them ongoing assistance and timely feedback, both throughout the three-day training session and as a result of the process. In addition to the instructor's input, the participants also recognized the value of peer assistance in the flipped classroom. The study also showed how important it is to provide feedback during the process rather than as a finished product. According to Wiley and Gardner (2013) and Hamden et al. (2013), giving prompt feedback and assistance throughout the process is far more advantageous than merely rating the performance at the conclusion. It was discovered that the Double Flipped PD Training Program was effective in two ways when it came to helping the learner achieve the Zone of Proximal Development (ZPD). During the course of the three-day training event, it first helped the participating teachers discover their full potential. Second, when they flipped their actual classes, the teachers made revisions to the same procedure. Nonetheless, the study found that two



*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

factors—follow-up scaffolding and reflection—are crucial for reaching the Zone of Proximal Development. It has been discovered that scaffolding was offered as a follow-up exercise throughout the training course. Even though there were numerous chances to consider what had been learned thus far and proceed to the next phase with MKO's assistance and direction. These results are consistent with those of Ahmed (2016) and Moore et al. (2014), who have backed the notion of a teacher or instructor offering ongoing support so that the student or learner may push his or her limitations and think creatively to realize his or her full potential. Kehoe et al. (2018) and Razak et al. (2016) also discussed the significance of encouraging teachers to engage in reflective practices in order to help them unlock their own potential and help students develop similar habits.

It has been discovered that this training program serves as an example for getting participating teachers greater practical experience. The participants connected the idea of hands-on practice to Double Flipped itself as well as to the group activity. There were two basic ways that hands-on learning occurred in the Double Flipped PD Training Program. Initially, the three-day training course gave teachers a chance to see firsthand how the flipped classroom operates. Second, the teachers put this concept into reality in their actual classrooms, as COVID-19 has forced them to employ a mixed form of instruction. The earlier training sessions were condemned by the attendees as being more theoretical and requiring them to do nothing more than sit, listen, and leave. Regarding the teacher training program, Aslam (2017), Bashiruddin (2011), and Khan (2011) all emphasized how theoretically heavy our curricula are compared to actual practice. These results are consistent with those of Majoka et al. (2013) and Aslam (2017), who found that during teacher preparation programs, teachers must gain practical experience integrating ICT into the classroom, utilizing multiple instructional techniques, and dealing with students who are 21st century learners. Both Belland et al. (2015) and Razak et al. (2016) discussed the value of practical experience when including students in group projects. It has been discussed that if it is necessary to encourage experiential learning or activity-based learning, group work should be encouraged.

One of the study's key conclusions was that prior to introducing any ideas into the classroom, teachers had to be rigorously trained. Due to the COVID-19, it was discovered that teachers encountered numerous difficulties when e-learning or hybrid learning was used. It made clear that the teachers lacked the necessary preparation to instruct students in such a development. The results of this study strongly suggested that before implementing any technological changes in education, teachers must be ensured to be competent. The similar topic of teacher preparation was covered by Restad (2013), Minaz et al. (2017), Asensio-Pérez et al. (2017), and Kehoe et al. (2018). Realizing that our professors are also professionals in their fields is crucial at this point. Therefore, in order to improve student learning, it is necessary to first improve instructor effectiveness. According to the study, the Double Flipped Professional Development Training Program is a useful concept that can raise the standard of professional development training for instructors. It was strongly recommended that the best way to embrace blended learning is to flip the training program itself. It can help with the many obstacles that evolved from the professional development programs' exclusive use of in-person or online education. The study investigated how this Double Flipped Professional Development Training Program worked well for flipping the training workshop for teachers' professional development, even though it was centered on

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

meeting the National Teacher Education objectives. The Double Flipped Professional Development Training Program is a helpful idea that can improve the caliber of professional development training for teachers, the study finds. It was highly suggested that flipping the training program itself would be the greatest method to embrace blended learning. It can assist with the numerous challenges arising from the professional development programs' reliance solely on online or in-person instruction. Despite being focused on achieving the National Teacher Education objectives, the study examined how this Double Flipped Professional growth Training Program was effective in flipping the training workshop for teachers' professional growth. In summary, the Double Flipped Professional Development instruction Program shown efficacy in offering secondary school teachers instruction in numerous aspects. In order for the instructors to be proficient enough to use the concept in real classroom instruction, it has first provided them with an opportunity to experience the flipped classroom in action. Second, it turned out to be a successful tactic for raising the standard of teacher professional development training courses. Third, this training program helped prepare teachers for blended or hybrid learning environments by teaching them how to balance online and in-person interactions in a more structured manner. Fourthly, it helped the teachers learn and teach through blended learning and e-learning at the same time, as well as constructively incorporate ICT into the classroom. Fifth, it offered several chances to contextualize the learning in accordance with the demands and needs of the modern world, where blended learning is being conducted worldwide. Sixth, it offered the ideal balance between encouraging solitary study and group projects. More cooperative or collaborative learning occurred during the session, while the assignments completed outside of class encouraged independent learning. Seventh, this training program is successful because it gives participants plenty of chances to socialize with one another while working in groups, give prompt feedback, and receive ongoing assistance from peers and the instructor. Eighth, it has shown to be a platform that encourages teachers to engage in reflective activities.

## References

1. Alam, A., Khurshid, F., & Alam, T. (2020). Students' and Teachers' perceptions about The Flipped Classroom Instructional Strategy in Pakistan. *International Journal of Management (IJM)*, 11(8).
2. Ahmed, H. O. K. (2016). Flipped learning as a new educational paradigm: An analytical critical study. *European Scientific Journal*, 12(10).
3. Asensio-Pérez, J. I., Dimitriadis, Y., Pozzi, F., Hernández-Leo, D., Prieto, L. P., Persico, D., & Villagrà-Sobrino, S. L. (2017). Towards teaching as design: Exploring the interplay between full- lifecycle learning design tooling and teacher professional development. *Computers & Education*, 114, 92-116.
4. Aslam, M. (2017). A Study of Continuous Professional Development Program and its Relevance to Professional Needs of Primary School Teachers (Doctoral dissertation).
5. Bashiruddin, A. (2011). Learning and teaching of English in Pakistan: A narrative inquiry. LAP LAMBERT Academic Publishing.
6. Belland, B. R., Burdo, R., & Gu, J. (2015). A blended professional development program to help a teacher learn to provide one-to-one scaffolding. *Journal of Science Teacher Education*, 26(3), 263-289.
7. Beglau, M., Craig-Hare, J., Foltos, L., Gann, K., James, J., Jobe, H., & Smith, B. (2011). Technology, coaching, and community: Power partners for improved professional development in primary and secondary education. In *An ISTE White Paper, Special Conference Release* (pp. 1-21).

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

8. Chan, T. W. (2010). How East Asian classrooms may change over the next 20 years. *Journal of Computer Assisted Learning*, 26(1), 28-52.
9. Enfield, J. (2013). Looking at the impact of the flipped class room model of instruction on undergraduate multimedia students at CSUN. *TechTrends*, 57(6), 14-27.
10. Fatima, S. S., Arain, F. M., & Enam, S. A. (2017). Flipped classroom instructional approach in undergraduate medical education. *Pakistan journal of medical sciences*, 33(6), 1424.
11. Gunyou, J. (2014). I Flipped My Classroom: One Teacher's Quest to Remain Relevant. *Journal of Public Affairs Education JPAE*, 21(1), 13-24
12. Hodges, C. B., Moore, S., Lockee, B. B., Trust, T., & Bond, M. A. (2020). The difference between emergency remote teaching and online learning.
13. Jahangir, R. (2020) Virus closures make classes go digital in Pakistan. Retrieved from <https://www.dawn.com/news/1539441>
14. Kehoe, T., Schofield, P., Branigan, E., & Wilmore, M. (2018). The double flip: applying a flipped learning approach to teach the teacher and improve student satisfaction. *Journal of University Teaching & Learning Practice*, 15(1), 7.
15. Khan, S. (2014). A model for integrating ICT into teacher training programs in Bangladesh based on TPCK. *International Journal of Education and Development using ICT*, 10(3).
16. Khan, S. M. (2011). Comparative Analysis of Teacher Education Programmes in Pakistan and UK (Doctoral dissertation, Sarhad University of Science and Information Technology Peshawar, Pakistan).
17. Khaliq, A., Baig, I. A., Bakhsh, K., & Ahmad, M. S. (2017). Usability of ICT as a Tool for Professional Development of Teachers at Secondary Level. *Journal of Independent Studies and Research-Management, Social Sciences and Economics*, 1(15), 117-141.
18. Majoka, M. I., Fazal, S., & Khan, M. S. (2013). Implementation of Information and Communication Technologies (ICTs) in Education Course: A Case from Teacher Education Institutions in Pakistan. *Bulletin of Education and research*, 35(2), 37-53.
19. Mehmood, A. (2020) COVID-19: Education in Pakistan gets mundane attention. Retrieved from <https://www.thenews.com.pk/print/660617-covid-19-education-in-pakistan-gets-mundane-attention>
20. Minaz, M., Tabassum, R., & Idris, M. (2017). An Experimental Study of the Performance of Prospective Teachers of Flipped Classroom and Non-Flipped Classroom. *Pakistan Journal of Education*, 34(2), 167-182.
21. McGivney-Burelle, J., & Xue, F. (2013). Flipping calculus. *Primus*, 23(5), 477-486.
22. Moore, A. J., Gillett, M. R., & Steele, M. D. (2014). Fostering student engagement with the flip. *The mathematics teacher*, 107(6), 420-425.
23. Ortlieb, E. T., Biddix, J. P., & Doepker, G. M. (2010). A collaborative approach to higher education induction. *Active learning in higher education*, 11(2), 109-118.
24. Overmyer, G. (2014). The flipped classroom model for college algebra: effects on student achievement. *Colorado*
25. Perez, R. (2017, July 13). Flip everything you know about professional development. [Blog Post]. Retrieved from <https://www.schoolology.com/blog/flip-everything-you-know-about-professional-development>
26. Razak, R. A., Kaur, D., Halili, S. H., & Ramlan, Z. (2016). Flipped ESL teacher professional development: Embracing change to remain relevant. *Teaching English with Technology*, 16(3), 85-102.
27. Restad, P. (2013). Tales from a flipped classroom. *Faculty Focus* e.
28. Saeed, M., & Akhtar, M. Problems and Issues in Implementation of CPD Framework: Perception of District Teacher Educators and Teacher Educators.
29. Bergmann, J., & Sams, A. (2012). Before you flip, consider this. *Phi Delta Kappan*, 94(2), 25-25.

*The Double Flipped Professional Development Training Program: A Voyage towards Digital Transformation*

30. Staker, H., & Horn, M. B. (2012). Classifying K–12 blended learning.
31. Strayer, J. F. (2007). The effects of the classroom flip on the learning environment: A comparison of learning activity in a traditional classroom and a flip classroom that used an intelligent tutoring system (Doctoral dissertation, The Ohio State University).
32. Turan, Z., & Goktas, Y. (2016). The Flipped Classroom: instructional efficiency and impact of achievement and cognitive load levels. *Journal of e-learning and knowledge Society*, 12(4).
33. Taylor, D. R. (2000). Developing powerful learning communities using technology. AACTE
34. UNESCO. (2020, March 13). COVID-19 educational disruption and response. Retrieved from <https://en.unesco.org/covid19/educationresponse>
35. Warford, M. K. (2011). The zone of proximal teacher development. *Teaching and Teacher Education*, 27, p. 252-258.