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TEACHING OF MATHEMATICS IN PAKTIKA TEACHERS' TRAINING CENTER: THE PERSPECTIVES OF TEACHERS AND STUDENTS TOWARDS THE USE OF VARIOUS METHODOLOGIES IN THEIR CLASSROOMS

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ABSTRACT

Choosing the best pedagogies and methods for students has become a focal issue in education. Hence, teachers need to evaluate and improve various skills. Therefore, this study was set up to investigate the teachers teaching methods they use during their teaching. The researchers have selected this Hence, teachers need to evaluate and improve various skills. Therefore, this study was set up to investigate the teachers teaching methods they use during their teaching. The researchers have selected this topic because to find out the types of teaching methods and to evaluate that how teachers use the subject and pedagogical knowledge. Currently, there are three Teacher Training Colleges in Paktika province, and the current study is conducted in Zarghun Shahr. The important thing is that how often they use the teaching method theories which they have learned, also at which level they understand their students to be able to identify students and their differences and learning styles. In this study, two mathematics teachers were observed during their teaching. Which were quite important for the current study to observe which methods do teachers use while they teach. The researchers also interviewed both the

students who were in those classes and their teachers. The data have been collected by using observation and interview tools. And the unit of this research is teacher educators and students of teacher training colleges. This study will help all teachers (lecturers, teacher educators, and primary and secondary school teachers), to adapt useful methodologies in their classrooms.

Keywords: Teaching, Mathematics, Methodologies, Teaching Training Centre, Paktika, Afghanistan.

JEL Classification Codes: A19, B10, B25, C10, C53.

INTRODUCTION

Education is and always will be very important in building a strong foundation in the life of human beings. This is especially true in terms of looking at our future generation. Education is a strong building block in building a strong and healthier importance Effective Teaching to our youth today, it can help the students to achieve the best results they can at school and in their long-term life.

Effective teaching requires considerable skills in managing the tasks and situations that occur in the classroom each day. Skills such as effective classroom management are central to teaching and require "common sense". Most people would agree that good teachers are caring, supportive, concerned about the welfare of students, knowledgeable about their subject matter, able to get along with patients, and so on good qualities. It is just the successful transference of knowledge and skills or application around a particular topic.

Whenever students are graduating from Teacher Training Colleges or universities, they learn many things theoretically according to teaching, while, on the other hand, practically they do not know many things to teach or to use on time and in their place. If teachers want to teach very well or to try to teach according to the rules of education, they may face different kinds of difficulties and limitations at the beginning. For example; to learn driving of a bicycle; firstly it needs good thinking. Secondly, the rider has to be motivated for doing this kind of work. Thirdly, the rider has to do practice with the help of someone and at this time he/she must have the self-confidence to do so. After that, the rider may drive it more practically so at this time learning will take place, now still one cannot say that he/she has learned driving bicycle completely, because they may create some new thinking in our mind like how to save ourselves from the dangerous moments? How to cross from someone else? These all can improve our knowledge of driving a bicycle. Moreover, if one claims that after graduation there are no difficulties in teaching, it is completely wrong, because it is right that one has learned many things theoretically, while practically it needs a new experience of teaching to manage classroom teaching.

For this reason, this study has investigated the teaching methodology in Paktika Province in Teacher Training College (TTC), in the math subject which teacher educators use to their students. The important thing is that how much they use the teaching method theories which they have learned, and these teachers are applying these techniques in their schools, how much they follow the pedagogical aspects. What are their problems and why they cannot learn very well and how they can solve their problems? The data have been collected by using two instruments' namely, observation and interviews. At first, the researchers have observed both classes five or six times, then interviewed the TTC teachers and students to have their views as well.

LITERATURE REVIEW

The teacher should know the basic rules and techniques of education and training. He/she should have enough knowledge related to his/her subject. Also, the teacher should know why some students can learn but some cannot learn very well, for what they learn. Furthermore, it is important to know that how to teach, how to control the class, why it is important to use different methods, and which techniques are required for effective learning.

The word method has been taken from Latin “Method us" which means rules, techniques, and the ways of solution for a problem. So, we can define it as Teaching methods that are fixed and orientated ways in education and training that can reach the teachers and students to their goal immediately (Aimal, 2012).

Using different methodologies is good for the students to be flexible mathematical thinkers and can motivate students to work for solving problems.

Progress in mathematics depends very much on the ability to see such underlying patterns, and this ability grows with the maturing child and can be encouraged by careful teaching and useful methods (Wadhwa, 2006).

All the time, whenever someone wants to teach mathematics, it takes time to make understand the young students. Most of the time, effective teaching can be taught by professional teachers by using different methods and contexts. If a teacher who wants to teach math effectively should have two goals as he/she must help students to learn skills of solving problems and they should master critical thinking skills as well (Halimi, 2013). The best way to teach mathematics is to clearly show the procedures (methods) to solve the mathematics problems. Also, the best way to teach mathematics is to show students how to solve some example problems (Kumar, 2013).

Whenever we want to teach, we might be dis-motivated, we might not control ourselves and we might not control our class and teach very well, for solving these kinds of problems we need the practice to do more practice, to have a good plan for our teaching and managing the time of class and teaching, also to take suggestions of expert people who are much experienced in teaching, can give us good confidence for teaching and to teach without any problem (Azimi, 2017).

Science cannot be used in society without a body of men and women who have been specially trained for science-based vocations in industry, research, and teaching. A vocational justification is, therefore, possible for science teaching (Jaya, 2004).

One of the most powerful pedagogical moves a teacher can take is that supports making detail explicit in mathematics, in both explanations given and questions asked (Franke et al., 2007).

In Afghanistan, teachers want to know about new methods, user experiences, and the types of rules which can improve teaching and make it a success. Teachers must find the individual difference between students according to their ability; understand their specific needs in the learning process, respect individual differences of students, this is quite important to answer the questions in a different style and understanding the main parts of the curriculum and usage of that in its place. In students' life, the important elements are not a book, class, and passing from one class to another, while the important element is the teacher for the students because this is the teacher who can give self-confidence to each student and can open different kinds of success in their life. Some expert and professional teachers can make the condition of class very well for learning. So teachers must know the rules and different methods of teaching, to teach with the importance of that subject and those subjects he/she wants to teach it must be based on the expertise level of him/her.

According to Vij (2016), "schools are about teaching and learning; all other activities are secondary to these basic goals. But teaching and learning in the contexts just described can be challenging for both teachers and students". They raised one question that 'what is good teaching?' They claim that good teaching is not confined to classrooms; it occurs in homes and hospitals, museums and sales meetings, offices, and in many more places we can learn from each other's behavior. They state that good teaching will occur when teachers are both knowledgeable and innovative, they must be able to use different strategies and must be capable of utilizing new strategies, they must have some basic research on managing the class, they should have a framework for their teaching and classwork and they must know the ways of students' development.

The first framework for teaching was published by Danielson, in the year (1996) and has been revised three times since then, the latest in 2013. Danielson's Framework has four areas of responsibility: 'Planning and Preparation, Classroom Environment, Instruction, and Professional Responsibilities (Vij, 2016).

Within teaching, it is also important to use teaching materials, have a teaching plan, and making discipline in class as well as in school. Teaching and teaching materials should be prepared for that to reach students and teachers to their goal, which improves the students and learning positively (Aimal, 2012).

According to Husaini (2016), teaching method and pedagogy can be used differently by different stages in different times to be successful and reach our aim and it is stated that pedagogy is the way that content is delivered, including the use of different methodologies that help different levels of learners to engage in educational contents and learn much more effectively, recognizing that individuals learn in different ways.

While discussing the method, it can enable students to reflect upon concepts through interactions with others engaged in the same activity as well as allow students to be familiar with certain ways of describing mathematics, also can provide students opportunities to be able to have enough knowledge (Kosko & Wilkins, 2010).

Moreover, it should be cleared that applied examples are important in improving one's conceptual understanding, the teacher needs to integrate the fundamental ideas of mathematics with the combination of "real-world applications" (Muwahid, 2009).

Good methodologies are available for improving pedagogy; however, they have been applied systematically. To better understand how to deliver the curriculum most effectively, teachers must learn how to teach, how to engage the student in the classroom activities. In Afghanistan, teaching mathematics and science have many problems. The main problem is that we do not have professional teachers to teach integrating different skills and pedagogies which are more important for teaching especially in math and science subjects. Also, the teacher needs to know that how to apply these subjects in other fields, because most of the time students ask for the application of it, so it is important for the teacher to know all aspects of the teaching of these subjects.

Main Question

What are the pedagogies used by teacher educators for teaching Math and Science in TTC?

Sub-questions

What kinds of methods the teacher educators implement in their teaching?

What is the teacher educators' understanding of students' learning?

METHOD

Research Design

The pilot study is a small-scale research project which involves the use of qualitative methods to collect data from TTC students and teacher educators. This research was conducted in the period 2019-2020, which had different phases, classroom observation of mathematic classes, and interviews with math teachers. I have also interviewed 8 math class students. The observations and interviews were conducted for about two months, then the remaining time researcher started converting the data from the local language to the English language. Therefore, the researchers have taken each teacher's views, based on the observation of these two teachers and also interviewed them two. When it comes to the students, they were selected randomly. After that, the views of only 3 students were included as a sample from each class, because most of their views were the same. Moreover, teachers' ages were between 30-40 years old and students' ages were between 20-30 years old.

Site and Participants

The location of the study is Paktika province, a teachers' training center which is in Paktika Province, in Zarghun Shahr district, to observe the teaching methodology, also to interview the students of TTC as well as with the teacher educators of TTC to interview them related to the teaching methodology. In this TTC there are only in-service students who come for learning, different classes are there like mathematics, science, Islamic, English literature, Pashto literature, and many more. In these classes, the number of in-service students is about 100-120. All teacher educators are holding bachelor's degrees from different universities and have 4-8 years of experience teaching in TTC, also some of them have experience in school teaching.

Limitation

Since there may be some objections in the educational process by some people that are part of the sample of this research and they refrain to share their viewpoint, but researchers tried to design some research tools to make the identity of participants confidential and to make them confident about their identity. A major problem all over Afghanistan is not assisting researchers to collect their research as people do not help such activities which do not have monetary rewards. The second problem was the time limitation for collecting the data and working on that.

Data Collection Process

Actually, in TTCs there are two types of student's pre-service students and in-service students. For those TTCs which have pre-service students, most of the time they are taught in the morning time while in-service students come, or we teach them a second time because for the first time they are already teachers and teach at schools. So, this observation and research are about in-service students. In this process, researchers have selected one TTC in Paktika province, named Zarghoon Shahr TTC. I have interviewed and observed teachers and their classrooms for the data collection. Furthermore, researchers have completed the observations in four weeks. After that, researchers interviewed teachers and students. Each interview took approximately one hour. Taking interviews took much time because participants were busy with their classes and it took almost one month. So, it took almost one month for collecting the data.

Data Analysis

Firstly, researchers have analyzed the observation of math classes in 6 different periods, then interviewed the math teachers, and after that, the math students were interviewed.

The following is the table of teacher and students' activities that were observed during the six periods in math class. A math teacher has a bachelor's degree in mathematics. Moreover, he has six years of experience in teaching the current subject in TTC. Also, 25 students were in this class and it was their second year in TTC. There is only one math class when these students finish this course of two years, then other students take this class, all classes are going on in this pattern. So, the researcher observed one teacher teaching the same subject six times, three periods in one week and three periods in the next week.

RESULTS

The researchers observed and interviewed the math teacher who has a bachelor's degree in mathematics. Moreover, he has six years of experience teaching the current subject in TTC.

No	Question	Math Teacher Response	Remarks
1	What kind of teaching approach do you use?	I use the lecture method, discussion method, group method, and Q & A method, for their activeness as well as motivating them.	Here, if we look at the teacher educators' views the focus is on students' motivation. Math subject may require much more practical work to solve the question, so for more practical work, it is needed to make students active.
2	Which method you prefer more to work on and why?	I prefer the group and discussion methods because here students engage in practical work, they feel free for achieving the goal, they learn from each other, they are get encouraged, they learn how to communicate, each of them takes part in all activities, they learn authentic learning, it motivates the students for further learning. Students' do not learn only from books or teacher, while can learn from each other or classmates as well. Furthermore, it is also important to take students to the computer lab to show them foreign countries teaching related to that specific lesson, for their understanding and to know that what we read here, these all can be taught in all countries and the same things they learn so it shows the importance of that subject to the students.	The teacher is emphasizing students' communication and students can learn from each other. Learning is not only related to the books and chapters. That's why the teacher may give much time to the group working and discussion. He also said that all students are not equal; there are individual differences among the students, so it is important to use different methods. This teacher may think that by using this way students may pay more attention to this subject and they may learn very well because the same thing can be taught in different countries.
3	Which kind of reinforcement	Most of the time I use a reward for the students because I have experience from	This teacher wanted to follow the reward for his students. He gives

	do you use?	my own student life, which I have learned by reward those things are still in my mind, so that's why I use reward in my teaching.	more importance to his experience and it may have given good results to his teaching that's why he follows only the reward.
4	Do you consider gender issues in your class?	We have only male students here in TTC. However, when it comes to gender, so we should be accurate in these issues because people are a bit sensitive towards girls' schooling and education.	Gender issue was challengeable for this teacher because of cultural sensitivity and the lack of girls schools, so when there is no girls school, how we may have girls in TTCs.
5	Have you ever faced that kind of question that you could not solve that?	When it comes to problem-solving; commonly my students have problems in some basic mathematical structures and formulas. Sometimes when I use one thing without process, they directly ask that where it came from. In this case, I give the current question to the students if someone knows or can solve it, then if they cannot do it, I solve it or give the direction of solving, also sometimes I give it to them to find it from books. Sometimes, I also cannot solve that problem then search it on the internet, in books, or from my expert teachers.	The math teacher used to facing problems with the students and trying to solve their problems by engaging the students also he is trying to solve. He may think that the first chance should be given to the students to find out the result and students may learn struggling and finding the answer.
6	Why many students afraid of math and science subjects?	Student's fear will finish if the teacher teaches conceptually then procedurally, give connection to the real-life that how we can use it in our daily life, what is the benefit of it and how we can use it. We are not that much advanced in mathematics, to remove this belief that I cannot learn, but only that particular student can learn, so the teacher should make students believe that I can learn too and I have this ability to learn, also to make their mindset that it is for me and if that person can learn, so I also can learn and I have to learn.	For him it is important that to give the connection to real life, teach them conceptually. All the time students ask their teachers that "how we can use it in our lives and what is the importance of this in our daily life" like these kinds of questions they urge. It means they want conceptual learning. So the teacher may also spotlight the real use of mathematics in their real life.

The following table shows the responses of the math teacher about his subject

No	**Question**	**Strongly agree**	**Agree**	**Disagree**	**Strongly disagree**
1	Practical work of a subject is the base of learning and can take place in mind;		✓		
2	Teaching and learning by		✓		

	the new and modern method are very important;				
3	The methods which you apply here in TTC, are they all applicable in schools?		✓		
4	Are these all facilities available at all schools?			✓	
5	Satisfaction of students are important in class like in subject, lecture, homework;			✓	

Interview with the Math students

In this section, eight math students were interviewed. However, the views of only 3 students have been selected as a sample and because the data were already saturated. Randomly these 8 students are selected from twenty-five students (25). The interview process took four days, two students per day were interviewed and this interview took place in their part-time class because they were familiar with this class environment, in the place where they feel free or comfortable they may tell the fact. During this interview, their speeches were recorded instead of writing it, because writing the answers takes much more time or sometimes the researcher may miss some important facts and valuable opinions. Moreover, the interview was in their native language (Pashto), then researchers translated it into English.

No	**Question**	**Student 1**	**Student 2**	**Student 3**	**Remarks**
1	Can you define the teaching method?	The teaching method is a way by which teachers and students both can reach their goal quickly.	The teaching method is a technique and logical ways by which teachers can make students understand.	The teaching method is a logical way by which teachers can make their students close to the goal, for that we can say learning. And the teacher looks at the situation then selects the method.	It means using methods in teaching are the source by which teachers and students can reach the goal immediately.
2	When your teacher teaches you do you understand which method, he/she use?	Not completely because most of the time he mixes different methods. Nonetheless, in some cases, we understand	Yes, we can understand which method is used or take benefits from that. Commonly, our math teacher uses	We understand during the lecture that this method he selected for us to make us understood, like when someone asks the question, most of the time	I think it would be good that students understand the methods because they might also take benefits from them during their teaching.

		which method is used.	the discussion method to engage us in solving the problems.	at first he allows students to respond and solve the question.	
3	it is important to use different methods?	It is important to use different methods in teaching because some students understand the group method, discussion method, or sometimes if there is no time, it is important to use the lecture method.	Using different methods is a part of the curriculum and it is the responsibility of each teacher to use different methods. Experienced teachers know better how to use different methods.	It is better to use different methods in teaching because all students cannot Why understand in one method some students can learn from one and some can learn from another method. We assess students that which method is beneficial for them.	Individual differences are there among the students. It might be better for the teacher to know the individual differences, then he may select the method very easily and students may understand easily.
4	What do you think in TTC textbooks or chapters the problem solving is well structured or not?	In many cases, it is well-structured. The problems are just given for solving without direction, for those we try to use different ways and methods to find out the result or correct answer for that. For this kind of problem at first, the teacher gives us time to work in groups or discussions, after that if we	In TTC textbooks the problems are weakly structured. Many questions we have here in the textbook, they just gave the questions without direction, especially in exercise those questions which we cannot solve, so we leave for the teacher to solve it, when the teacher solve it, the	At first, here we have dictation problems in textbooks which make us disturb. Second, there are typing mistakes like they have changed the sign of (+) to (-), so our answer and teacher answers are completely different, and it makes us confused.	Here I think some time teacher might not prepare himself for the class, that's why students' answer is different because if he has checked the book before coming to the class, he might say that this sign you can change to (+) or (-) or this is a mistake you can correct it, it means preparation is more important for the teacher when he/she comes to the class.

		could not or it is difficult to solve it, then the teacher is trying to solve it and give the direction for that.	way is completely different.		
5	Which method do you prefer in the class and why?	I like the group working method. At first, the teacher gives us a question to work on individually, then work in a group, because it eliminates the pressure and we learn from each other as well.	I love the discussion method to talk about issues and to find out the result of some problems. Because I have well confidence to talk in front of the class or front of people. So through this method, I can learn very well.	I like group methods and discussion methods to be utilized in class. Most of the time we learn from other views, also here we feel free and without pressure, the pressure can be divided by all groups. Moreover, one mind can think one thing while four or five minds can think differently and may find an easy way to solve a problem as well can use different ways for the finding of the result.	They may learn very well in group working and may have seen the benefits from these methods. Or they may not feel themselves safely in working individually and they might afraid of the wrong answers, they do not want to be threatened in front of classmates.
6	Are you applying these methods in your classes and which method you prefer more?	I am looking at the classroom conditions as well as the textbook after that I select a method that is useful for students. While commonly I	Most of the time, I use the lecture method and discussion method, because I teach to the eighth and ninth-grade students, so	I prefer the lecture method in my classes at school because students are more than 40, so it is difficult to use group work or discussion. Also, they are too noisy; it is	The condition of TTC is a little bit different from the school because TTC students are not that number in classes, also the materials which are available here in TTC that much

		focus on student-centered learning and working on students.	they can understand and can share their views also respect each other's views.	difficult to control them.	they might not have, so it might be a little bit difficult for them to apply all the methods over there.
7	Why many students afraid of mathematics?	Because students do not follow the daily lectures and do not practice examples. Moreover, they do not connect previous lessons to the new lesson.	The teacher only focuses on solving questions; does not do practical work which is more important for the students. Most of the time students learn through practical activities like our teacher gave us a question to estimate the classroom and find the center of the class, then he showed different kinds of pictures on projector and the foreign countries lectures for our more understanding and make acknowledge that in foreign countries also the same thing can be	There is no Practical work for the math subject that's why students cannot understand well, they learn theoretically which they forget soon. Lack of methods that teachers cannot use the method on time and logically applying of math to give connection with life. The teacher does not know the pedagogical content of knowledge for the students.	They might give more importance to conceptual learning in place of procedural learning. They might think that this is how students learn by heart. Also, PCK (Pedagogical Content Knowledge) is important for the teacher like we can say that; Teacher knowledge Teaching Students learning.

			taught.		
8	Have you ever faced that kind of question from students which made you confused?	Yes, many times students ask different kinds of questions. Those questions which I can solve I make students engaged to solve if they could not, then I give the direction. However, those questions which I cannot do it I tell them that I will bring them tomorrow. I search it in different books also ask the expert teachers to give the correct answer.	Sure, many times we face different kinds of questions. When I face that kind of question which I cannot, I search in different books to find out the solution and then search the internet. For example; once one student asks me in the class that "every number at the exponent of zero is equal with one ($a^0=1$), so zero at the exponent of zero is equal to what ($0^0=?$)" it was a completely new question to me. I searched it on the internet and found the solution.	Yes, sometimes we face different questions that students ask. In this case, I give it to the students to search the solution because it makes students active and creative, also which things they searched, they will never forget.	They face problems when they teach at their schools, some of them first give to the students to engage them in, and then give the direction to solve it. If the teacher also could not at that time, so they search in books also on the internet. While the third student was more focusing on students working to engage them in question because when they engaged in and found the answer, they will never forget it.
9	Do you consider cultural norms in your	We must focus on and respect cultural and religious issues.	Yes, we focus on cultural issues. We are a part of this society;	Sure, I give attention to cultural issues because our society is	They all are more focusing and respecting the culture and religion. I asked

	teaching?	Because this is the society where people respect and give much attention to the culture, as well as reject the things which are against religion and culture. We had one teacher in our school, who was not giving attention to these things, people made him leave this school and he finally moved to another one.	we should follow the rules of our society.	religious and cultural. People respect these things, so we must focus on these things during our lectures. For instance; to wear the clothes which are the custom of this society, giving the examples in a lecture which are more famous here, and showing them things on the projector which are not against of this society.	them that "here you saw the thing which was against your culture?" they told me that "the videos of foreign countries which teacher shows us, lady teacher clothes were informal and it was against our culture, we cannot show these kinds of videos to our young students." They may think if someone does not follow society's rules he/she might be rejected from the job.
10	How you found the center of that computer lab when the teacher asked that "who can find the center of this room or center of this carpet" and you found it without measuring?		The second student told me that "before asking the teacher I thought by myself and count the flowers which were on the carpet. From four sides I count the flowers and found the center of this room."		It might be the teacher used different methods for their understanding that made the student think about anywhere related to their study and lesson to apply it in their life. Or might be this student was giving connection to the life that how to apply it in our life.
11	Can you explain the differences between the	New methods can include student-centered	New methods include group methods, discussion		While teachers use various types of methods, students can also

	new method and the old method of teaching?	methods, active learning methods, and practical methods. And traditional ones include; teacher-centered methods, lecture methods, and so on.	methods Q & A methods. The traditional ones: lecture, theoretical methods, and teacher-centered methods.		decide which method is useful for them and how to adapt them with this particular method.

DISCUSSION

During the observation of mathematics class, it has been found that the teacher was normally teaching to his class, giving more time to the students, asking questions, working in front of the class on the whiteboard, working in groups. Therefore, it can suggest that it was a student-centered learning class. They were looking very active during group discussions also at the time of the experiment or at the time of practical work they were feeling happy. Also, these methods could be used in school as well.

In the interviews, the math teacher often expressed views that give time to the student to work especially work with his classmates, to learn from each other; also, they may get the courage of speaking and social behavior of life. As per the remark made by the teacher during the interview that only learning is not important that just complete and finish the books, it does not matter that they have learned something or not, they can solve their future problems by this learning, how they can apply it in their life like to teach to others and many more. Moreover, students were also emphasizing that to be done for them the group work as well the practical work, because whenever we see something and the process of that, it will remain in our mind and is unforgettable. One thing more, that some of them mentioned that we understand which method and pedagogy teacher use during his lecture, but some of them were saying that in some cases we cannot understand which method teacher use because we focus on approaches to learning what the teacher teaches. Also, we need to learn well because we are also teachers in schools, we have to teach these things, to make our students understand and provide the facilities for their better learning and to bring changes in their mind.

Finally, interview responses and classroom observations indicated that most of the time teachers gave time to the students to work individually, then work with classmates in groups, after the teacher gave the direction of the problem and solving the question for them. Also, it should be taught conceptually, then procedurally. Furthermore, the teacher was telling them that you may teach it to your students in this and that way to make them understand, also the teacher was giving time to the students to think that how this to be taught to your school students to make them understand. The teacher educator was able to teach professionally with all those

approaches to make the students teach in their classes in a very good way. From the observation of the class looks the teacher was assessing the students daily by asking the questions, also the teacher educator was trying to train the students for their work and assess their students.

Furthermore, the findings described here as well as findings from studies conducted elsewhere suggest that teachers should focus more on practical work, teach conceptually than procedurally, and give time to the students to work on problem-solving with/her classmates also work individually, these kinds of pedagogies using for the students, can make students active, intelligent, creative, and they can memorize also can learn very well.

CONCLUSION

This research was conducted in a Teacher Training College (TTC) of Paktika Province for math subjects teaching pedagogies. Teaching observations were conducted several times in math classes, teachers used different pedagogical aspects for the students and different methods, giving time to the students to ask and solve the questions, first tried to find the solution by students, and then the teacher was giving the directions and solving questions. It is good to use different methodologies because it can make students flexible mathematical thinkers; also it is good for motivating the students for solving the problems.

Moreover, in the interview section, math teachers gave their responses to those questions, which were asked, like the pedagogies they use in teaching, how they understand the students and how they solve their problems. Also, the materials they use for teaching like using laboratory, computer lab, watching different videos related to their topics, and doing different experiments. Commonly, these mentioned materials and things are often in use in the Afghan TTCs, also in some schools. Furthermore, teachers and students were thinking about the cultural and religious issues in teaching, like showing the foreign countries videos also these pedagogies were able to use at schools as well. Students were given more chances for the practical activities to be done for them and more focusing on conceptual learning. First, it is important to make students understand conceptually and then procedurally. Also, focusing on individual differences among the students is more important for the teacher, here they were also emphasizing this. However looking at these aspects is to be expected from professional teachers that they can take benefits from their knowledge and experiences, as mentioned in the framework of teaching in the literature review that preparation, classroom environment, instruction, and professional responsibilities. These all can be applicable in TTCs and they give these norms to their students and encourage them to apply them in their classes as well.

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