

Classroom Practices of Teacher Educators: Constructivist versus Traditional Approach

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Abstract

Teacher education curricula have been innovated in Pakistan. The curricula recommends constructivist practices for teacher educators. The current study examined the instructional practices of teacher educators in Khyber Pakhtunkhwa (KP), Pakistan. The overall objective of the study was to find out whether teacher educators (TE) used constructivist or traditional instructional practices in the Departments of Education (DoE) and Regional Institutes of Teacher Education (RITEs). Classroom observation protocol was developed for investigating the practices of 31 teachers, they were randomly selected from 211 teacher educators from 09 DoE in universities and 20 RITEs. Analysis of the data showed that teacher educators used most of the time traditional classroom practices, they did not use proper methods which could enable the prospective teachers to create knowledge, they transmitted knowledge, most of the teachers did not use constructivist practices and they did not have full cognizant of constructivist practices. Teachers did not come to the class well prepared for teaching for following constructivist practices. The study recommends training on constructivist practices, provision of a separate cadre of teacher educators in RITEs, and training on the use of information technology, and the provision of internet in teacher education institutes.

Keywords: Teacher educators, traditional classroom practices, constructivist classroom practices

Introduction

Changes are taking place in the world of science, social sciences as well as education. That is the reason, learning theories changed from behaviorism to cognitivism and then to constructivism (Cooper, 1993). Reforms in education cannot be materialized when teachers do not leave the transfer type of pedagogies and opt for

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constructivist ones (Beck, Czerniak & Lumpe, 2000; Levitt, 2002). Constructivist teaching has gained space in academic discussions, state-level policies, and curriculum. Planning dominates and policymakers are asking teachers to throw away traditional approaches and teach through a constructivist approach (Richardson, 2005). It is considered as a suitable framework for both teacher education students and students from grade 1 -12 students (Cannella & Reiff, 1994). Besides other requirements for teaching science through constructivism, teachers should be well educated and they may have a professional framework that could enable them to behave in a caring, autonomous, and intelligent way (Nezvalová & Lamanauskas, 2009).

There are three main approaches to teaching, behaviorism, cognitivism, and constructivism. According to behaviorism, behaviors are learned; cognitivism advocates that knowledge makes changes in behaviors. Cognitivism considers current knowledge important for further learning. On the other hand, constructivists emphasize keeping the students active in the process of learning and developing an understanding of information and creating knowledge (Woolf (2015).

There are different views among the constructivists about constructivist practices but they agree on the four dominant features, learners build their knowledge, learning starts from available understanding, social interaction is essential for learning, students and instructors use actual life hitches for learning. (Bruning, Royce& Dennison, 1995; Pressley, Harris & Marks, 1992).The movement for practicing constructivist countries is not limited to developed countries, developing countries are also asking educators to use constructivist pedagogies for teaching in schools as well as teacher training institutions. The curricula of Associate Degree in Education (ADE) and BS in education in Pakistan recommend constructivist pedagogies that may develop critical thinking and self-learning of students. (Higher Education Commission, 2012).This study investigated the instructional practices of teacher educators in KP. First of all, the researchers developed a proper understanding of the constructivist approaches and then developed protocols for the study. The protocol consisted of observing background knowledge, problem-solving, asking probing questions, interaction amongst students, the interaction of students with teachers, enough time after asking a question, and relating the classroom activities to real-life issues. Classroom observation was deemed fit for the understanding the practices of TE because it gave the real picture of teacher educators' classroom practices. The researchers visited classrooms for observing the actual classroom practices of TE. The main objective was to find out if TE uses constructivist instructional practices or traditional practices. The study is significant for teacher education in Pakistan, educators, policymakers, and trainers. They would come to know about the inside

stories of the classroom in teacher education institutes and thus it would benefit teacher education in Pakistan.

Purpose of the Study

Quality teachers have no alternative for quality education and teacher educators play a significant role in producing quality teachers. A good curriculum would not be effective if it is not implemented properly. In Pakistan a lot of efforts have been put in the revised curricula for quality teacher education, it would be fruitful if recommended practices are followed in true spirit. Therefore, it is essential to examine whether the teacher educators use traditional instructional practices or they use constructivist instructional practices.

Literature Review

Constructivist and Traditional Approaches

Constructivism develops deep learning by relating content to actual lives of the learners, new learning is developed keeping in view the related knowledge of students, learners try for deep learning by learning basic principles and in the constructivist learning the learners use various sources for developing a deeper understanding of the content while in traditional approaches, learning takes in isolation, background knowledge is not given much importance, learning to involve memorization. Moreover, in traditional approaches learner typically hinge on the text (Sawyer, 2006).

Constructivist teachers display certain behaviors, for instance, they model good learning, facilitate learners, use different methods of assessment, ask open-ended questions, and ensure mutual interaction for the sake of learning. And they present real-life issues for discussion (Leinhardt, 1992). Constructivists' learners' frame problem, analyze it, and then seek solutions; learners ask open-ended questions, use cognitive terms like, compare, contrast, and analyze. It is not necessary to follow strictly a lesson plan. Teachers question the concept of learners before giving them their concept (Brooks and Brooks, 1993). Constructivism in teaching also recommends different approaches to assessment, like, portfolio, authentic assessment, and questions are asked about in-depth knowledge, not only memorization, it means that assessment is not limited to paper-pencil tests, (Paulson and Paulson (1994).

Use of Constructivist Approach in Teacher Education

Constructivism is a more likely, pertinent, fruitful, and empowering framework for teaching at school as well as for educating prospective teachers (Cannella & Reiff, 1994). The constructivist approach aims to educate the learner as per his interests; social change and reforming a society along with democratic principles. This idea of learning is based on the theory of human development where a learner is kept in a social set up

and there is a constant discourse among the students, teachers, and learners (Vadeboncoeur, 2005). Teacher education may use constructivist learning experiences for pre-service teachers to learn content and instructional expertise (Haney & McArthur, 2002). This approach has changed teacher education from learning certain activities to a thinking teacher who can make autonomous decisions about teaching in different circumstances. Each prospective teacher has personal philosophies, longings, and earlier knowledge. Teacher educators must not plan such directions which are by all books appropriate to each student. Each teaching situation differs from another, and there may be different ways of dealing with it by using personal reasoning (Novel, 1993).

Constructivism does not entail to learn everything from the beginning, there are many already learned skills which are equally useful with a new process in a constructivist classroom. Educators need to teach the skills and knowledge that are needed for the required for the implementation of constructivist practices in the classroom. Constructivism demands for less controlled and diverse classroom practices. The skill of teaching through a constructivist point of view can be easily learned. The learners have to change their point of view from receiving knowledge to creating knowledge. However, it is a change, and change needs time. Educators have to be patient and teach essential skills that are required for an application. Teaching through a constructivist approach becomes easier when students are used to it. In the beginning, it would be difficult but not impossible (Smith & Mitchel, 2008).

Methodology

Research Design

The study used descriptive research and examined the instructional practices of teacher educators KP, using classroom observation. The population consisted of 211 TEs from the teacher education institutions in Khyber Pakhtunkhwa. There were 20 Regional Institutes of Teacher Education (RITES) and Departments of Education in in 9 Universities) where education as a discipline was offered. Total faculty members in the 9 Departments of Education were 63, of which 24 were female and 39 were male members. The total number of faculty in these RITES was 150 during data collection for the study. Of the 212 teacher educators, 34 teacher educators were selected through random sampling techniques. The sampled participants consisted of 03 male and 09 male from universities and 11 male and 11 female teachers from RITES. Observation protocol was developed after studying the literature on constructivist and traditional practices. Constructivist practices, like, activating background knowledge, making use of variety of material for learning, encouraging students- teacher and students - students discussion on the topic, relating learning to real world, seeking point

of view of learners, multiple ways of assessment, letting the learners discover the meanings, error correction, formative and authentic assessment were considered in the protocols for observation. Each teacher was observed for 100 minutes. The observation was non participatory. The researcher did not use the real names of students in the study, T1, T2 and T3.... used for teachers' observed.

Data Analysis

T1 came to the class, he did not investigate background knowledge. He wrote topic on the board and explained it in Pushto. When he was done with the topic, he said, "Is it clear" The students said. "Yes". He did not ask probing questions from the learners, provided no opportunity for teacher and students or student- student discussion. He did not involve the students in a productive discussion, they just started talking to each other when the lesson was finished. Moreover, there was no formative assessment, the teacher did not conclude the lesson and did not refer to the use of the taught lesson in real school situation.

The researcher observed T2 who was a newly transferred teacher to the teacher training institute from schools. His topic was poets in Muslim era in Urdu subject. The teacher dictated to the students about the poet, he used to ask questions about important points while he was dictating. He himself explained the difficult words or phrases to the students. He, even, told about comma when it was needed in the writing. At the end of the lesson, he said to the students, "Is there any questions"? He did not ask for any activity or self-reading from the students. The teacher followed totally traditional method of teaching, there was nothing for the trainee to be learnt except the content, if the prospective teachers followed their teaching in teaching learning process, this would encourage transmission type of teaching and learning in classrooms.

T3 was a female teacher, she taught Mathematics in a RITE and she told the researchers that she had taken trainings. The teacher wrote a formula on the board and explained it. She involved students by asking questions. She even asked a student to solve question on the board and appreciated the student when the student solved the question. The teacher asked questions but did not provide enough time to the students answering the questions. She would answer the questions herself after a short while. The teacher had taken trainings. This teacher tried to make her teaching constructivist but it was clear that she did not have full cognizant of the approach. It was clear from the teaching of this teacher that students take interest and they can learn of constructivist approach is followed but the teacher need to be trained.

The researchers observed a teacher of English. She (T4) taught English to prospective teachers. The topic under discussion was 'Getting to know each other'. She wrote questions on the board and asked the students to answer. She wrote the answers

on the board. The teachers did not initiate any student- student discussion. She did not give any handouts or material to the students for reading. The teacher was polite and cooperative. No group activity or discussion was done in the class. Getting to know each other is an interesting topic for discussion and students' interaction but the researchers did not observe that warmth in the classroom. It means that the teacher did not practice constructivist practices.

T5 was a female teacher, she taught Urdu in RITE. She had given the task of collecting verses of Allama Iqbal on Khodi, freedom etc. She asked questions from students. She gave handouts on history of Urdu poetry and asked the students to read. When the students had any difficulty she corrected them. She did not prompt the students to make corrections. There was teacher- students' interaction but she did not provide any opportunity for student- student interaction. During the course of teaching she did not refer to the use of the method in primary schools.

T6 taught Mathematics, he was well trained teacher. He corrected misconceptions on the spot, sometimes provided opportunity to the students to find answers. He talked to the students most of the time. In the class no interaction among students was encouraged. He did not do any group activities in the classroom, he did not create problem solving situation for the prospective teachers. He taught from the book and did not relate the lessons to the issues of everyday life. He did not stimulate the students for discussion in the class.

T7 was a female teacher, the researcher observed her Mathematics class. The teacher brainstormed the students about the topic. Her topic was to find the area and circumference of cylindrical shape. She has brought cylindrical shapes to the class, she gave those to the students. She also made a cylindrical shape from a paper wrote the formula and practically demonstrated how to find the area and circumference. All the students took active part in the lesson. The teacher was well trained and she did activities based teaching and the class was really busy and full of enthusiasm. Even, the researchers got improved their concept of calculating area and circumference. This example demonstrated that activities based teaching is possible, teacher can make a lot of difference in their teaching they want.

The next teacher (T8) was a female teacher, she taught 7Cs of communication to the students, she brought handouts to the classroom, she asked for individual reading, peer reading and did jigsaw activity. She involved students and kept eye contact. It seemed that she was prepared for the class. She asked the students to read the material but she did not ask for feedback or response of the students. It was not clear that why she gave reading to the students. Again, preparation and understanding of the teaching process is necessary, both should go together for successful learning.

Another teacher (T9) was teaching scientific process. She explained it by doing an experiment in the class. She made it very clear to the students about scientific product and process. This was the second hands on teaching in the observed classes. T10 gave topic to the students and asked them to discuss but the students did not do it, there were a few responses. The teacher did not scaffold and motivate them for responses. The teacher asked them to go to the library and worked on the topic, he did not guide them what they had to do and did not accompany them to the library. I saw that the students dispersed outside the class and did not go to the library. This is essential that students should be provided with proper guidance, otherwise, lack of proper guidance would create disturbance and lack of interest.

T11 was a trainer and well experienced teacher. He wrote some points about effective teachers and then asked the students to express their views on the points. He also added his own point of view. The teacher was active and motivated, he wanted to deliver. The teacher did not relate the topic to the everyday life. There was no interaction among students. The teacher was not prepared for the class, he did not bring any material to the class. T12 used lecture as a method, delivered lecture and asked questions. He did not bring any material for the students. And did not encourage students-students interaction. He used only lecture in class.

T13 taught classroom management, he introduced the topic and ask the students to list the names of things which waste our time in 5 minutes. But the activity took more than 13 minutes. He did not ask the students to share their findings. He gave another activity and the students worked on it but again he did not ask the students to share their findings. He divided the students into groups, gave material. And he started explaining the material himself by delivering a lecture. He did not do any formative assessment. T14 was a trained, experienced and enthusiastic teacher. She made good use of all the materials, she stimulated the students, kept eye contact, did activities but one thing she did not accommodate teaching to individual differences.

T15 she wrote the topics on the board, asked questions and involved students in lesson. She explained in Urdu and English. The students listened to her silently. She asked the students to read the text and explained the points in English. T16 taught English, he asked a few questions about the previous lesson. He delivered lecture and wrote points on the board. He also asked questions from the students but there was no interaction among students.

T17 gave a figure to the students and asked them to write what come to their mind. After that he explained the topic 'Why do we teach science?' He explained and asked questions from the students. No students-students interaction took place, only teacher asked questions. There was not any question which could motivate the students for reflection. T18 was a trainer and senior teacher. He taught developmental domains.

He asked questions from the students, wrote points from his mind. He did not give any material to the students. The teacher had not come well prepared to the class, he had not devised any specific activity for the students so that they may work on them. He taught for a short time.

T19 corrected misconceptions, delivered lectures and did not involve the students in teaching learning process, and no knowledge creation was noted. T20 was an experienced and trained teacher, he asked about the previous lesson, encouraged the students to answer questions. He divided the class into groups and asked them to express their views on 'Why is art important for a child development?' T21 taught importance of language, brainstormed the students. He asked the students and waited for responses. But he did not bring any material for students 'reading, the teacher had not come with clear objectives and necessary preparation. The students did talk, yet they learnt nothing new.

T22 had given reading to the students and she divided the class into groups and asked the students to discuss the material. Then the groups shared their learning. The teacher asked them to relate their learning with classroom situation. T23 the teacher corrected misconceptions on the spot in students' work, facilitate PT, she prescribed certain methods for teaching, link teaching to real situation and gave that knowledge which is proven by research. There is a complex situation, the teacher followed some constructivist and others traditional practices. T24 gave handouts to the students, they worked in groups and the teacher visited them. At the end the students presented their work and the teacher summed up. T25 was one of the senior teachers in the RITEs, he corrected misconceptions on the spot, did not ask the students' to do it; he did not facilitate students and recommended only text. He did not do activities, provided accurate knowledge to the students. He rarely stimulated the students for learning and linked teaching to real world.

T26 corrected misconceptions sometimes. He encouraged the learners to memorize the lesson. He used only tests for assessment. The teacher did not encourage construction of knowledge, rather impart knowledge and skills. And he gave research proven knowledge and did not related to the real classroom situation in schools. T27 taught Islamiyat, he delivered lecture, he was teaching from book, he was only teaching through lecture, initiated no activity, he did not seek or encouraged the views of students. He rarely linked his lesson to the real world and the lesson. T28 the teacher asked questions from the students about previous knowledge, she wrote the definitions and asked the students to explain it, wrote points on the board. But there was no interaction among the students and she did not do any formative assessment.

T29 delivered lecture in classroom but it was interactive, he did not do any activity in class. There were rare open ended questions. He talked about what was there

in the text. T29 taught science to the prospective teachers. She asked questions about the previous lesson, involved the students by asking questions, and did an activity on students on conduction of heat and gave examples from daily life. Everything was preplanned, nothing missing in the class. This proves that it depends upon the teacher and his/her efforts if a teacher want to do activities based teaching, it is possible even in the available circumstances.

T30 delivered lecture, there was not any student-student connection. There was students and teacher interaction. The teacher did not link the lesson to the real world. T31, wrote the topic on the board and asked the students. There was no interaction among the students and little interaction between teacher and students. The teacher was not interactive, created no curiosity among the students and did not involve them in activities. The teacher did not maintain eye contact. There was nothing for the students to think over.

Discussion

The study investigated the classroom practices of TEs in KP, Pakistan. Teacher education curricula has been innovated and this new curricula demands constructivist classroom instructional practices from teacher educators. As mentioned above many teachers did not have command on the constructivist practices, they did not practice constructivism in classes or they do not have cognizance of constructivist instructional practices. As constructivist practices could change beliefs. It was noticed that teachers did not ask probing questions from the learners. Almost all the questions were related to knowledge and comprehension level questions. The questions did not motivate the students to think deeply. Students were not given chances to construct knowledge. They were given readymade material or the students noted points from the board or they were dictated lessons. It was also observed that experience and training is not the only thing which is needed for constructivist practices, it also needs the will and preparation of teachers. The researcher observed some junior teachers but they did better than many teachers who had long experience and taken training. Most of the teachers did not use their training or professional knowledge in their teaching. It means that when these prospective teachers did not practices constructivist teaching in their teacher education classroom, they will not practice these practices in their classes when they become teachers. According to Dangel (2013) constructivist teacher education effects beliefs, classroom activities and positive learning behavior. Moreover, it develops collaborative, and active learning habits, multiple ways of thinking and sensitivities.

There were a few teacher educators who really practiced constructivism in teacher education classroom. That is the reason that in spite of recommendations in education policies there is little use of learners' centered teaching practices. Teaching

needs proper preparation before the class. Most of the teachers do not come well prepared to the class for teaching. They do not have systematic approach to teaching and assessment. It was noted that some teachers asked the students to go library and search material or read a book. The researcher noticed that the prospective teachers were not given any proper plan for carrying out the task, the teacher did not tell them how he would assess or check their work. Some of the teachers were well trained, they could not do very well in classroom because they were not well prepared. Moreover, the researcher did not notice that the teacher educators created any problem situation for the prospective teachers. In most of the cases it was just reading or lecture. So, the real spirit of constructivism i.e., problem situation, was not seen in classrooms. The study supports the findings of Akbar, Akhtar, Hussain & Abiodullah (2013); Lim and Chai (2008).

As data showed that a few teacher educators could practice constructivist practices, therefore, there is a dire need of training and constructivist practices because according to Tatto (1998) “constructivist-oriented teacher education will have more influence on teacher education students’ views than conventionally oriented teacher education”. Teachers need to experience constructivist practices because only teaching theories cannot bring changes in practices and belief (Calderhead & Robson, 1991; Kagan (1992). Stofflett and Stoddart (1994) opined that teachers should be given opportunities of comparing different approaches of teaching, they would compare and contrast different approaches and consequently change would ensue in their beliefs and practices. There should be culture of experiments and cooperation. Teacher educators should actually try to apply theories, compare and contrast different approaches towards teaching and learning. This would broaden the mental horizons of teachers as well as prospective teachers. Further, the teacher educators should contextualize their learning. In our teacher education programs, there is little link between actual classrooms in schools and classrooms in education departments or schools. The teacher educators may bring real problem of the primary or high schools and make them topic for discussion and deliberation in teacher education classroom. This would make teacher education useful and effective.

Conclusions

1. There were many teachers who used traditional classroom practices. They just delivered lecture, corrected misconceptions of students by themselves, did not ask the learners to think over them. Even, some of them followed the very traditional method, i.e. dictating to the students and explaining each and every word to the students. Learners were not involved in any way in the process of teaching and learning.

2. Some teachers who were trained and enthusiastic for teaching really applied constructivist approaches in teaching. They did activities, let the students think over complexities, attended and gave time to the responses of learners, kept eye contact, valued the interpretation of learners, relate learning to the real school or real life in the surrounding. All such teachers were trained as well as well prepared and enthusiastic for teaching.
3. Only experience and training does not matter, the researcher knew many educators that they had taken a lot of trainings, yet they used traditional approach and if they tried it was not effective because they did not arouse the curiosity, did not bring material and activities for the learners, or they asked for such tasks which were not fruitful for the students. They did not guide the learners for doing effective activities in the specific time. They did not initiate any students- students' interaction for learning. Individual efforts and will to teach effectively are the necessary traits in effective teachers. It was noted that well trained and experience teacher did not do well when he was not prepared. The researcher noted that the experienced and trained teachers would have done very well, had they come well prepared.
4. There were some teachers who tried to be constructivist but their lack of experience and extensive training were they reasons that they could not materialized their planned lesson. They did not use proper use of the activities, they involved students in activities bit they did not encouraged them did not seek responses on their work, could not create real problem situation.
5. It was noted that some teachers did activities but they were not effective and did not give any learning to the students. The teachers did not scaffold the learners. Some teachers used both traditional and constructivist approaches in teaching. It means that teachers think that mixed approach would be useful or they did not have clear concept of constructivism and experience in the application of constructivist practices. It was also observed that a few teacher educator asked real probing questions. Most of them just checked knowledge level questions about the material what was taught in the class. No one initiated discussion or reflection in class.

Recommendations

1. Most of the teacher educators did not have expertise in constructivist teaching instructional practices, therefore, they may be given training in constructivist classroom practices. Most of them have been educated in a traditional, teacher-centered system of instructions. They did not apply the theory which they had studied in their student life.
2. Some teachers had been given training and they were trainers. They did not apply the strategies which they teach and study. It means there was a contradiction in their words and actions. Such teachers need to review their love for the professional. Their spirit or

love for teaching should be revitalized by professional development programs, group teaching, and other such professional development programs.

3. Teachers may be given material/ A.V. Aids for teaching to prospective teachers. Teachers should have access to the internet, library, and printer so that teachers might develop activities, assignments, and provide multiple sources of learning. Constructivist classes need space for the activities of students and teachers where they carry out all their activities.
4. New teacher educators should be trained when inducted in teacher training institutes. Constructivist practices and philosophy should be taught in teacher training institutes in universities and RITES.

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