

Teaching Action Research through Action Research at Higher Education in Pakistan: Experiences from the Field

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Abstract

In this paper, I¹, as a teacher educator and researcher, present the findings of my action research with two teachers in facilitating them carrying out their action research projects in classrooms in the Northern Areas of Pakistan. The data for the study came from reflective journals, semi-structured interviews, field notes, lesson observations, and reports. The findings of the study show that action research is one of the most effective strategies for the professional development of teacher educators and teachers yet it is a challenging process. Field reality and dynamics make an action research project challenging yet responsive to the needs. A three stage-model surfaced from the project in the context of planning and executing action research in schools. The paper concludes with certain implications and questions for policymakers, schools, and teacher educators to use action research as a strategy in pre-and in-service teacher education programs in Pakistan or elsewhere in a similar context.

Keywords: Action Research, Teacher Development, Pre-and In-service Teacher Education, Teacher Educator

Introduction

Action research is widely used for the professional development of teachers at various levels in many parts of the world. Literature highlights various types and scope of action research concerning the ways to carry it out or regarding the focus and scope (Hammersley, 2004). Besides being change-oriented, action research is also seen as instrumental to develop certain practice-based knowledge (Nawab, 2021; Somekh, 2006).

In this paper, I discuss my experience of using an action research approach to teach action research as a university teacher in Pakistan. Action research was a component of the Research Methods Course in a teacher education program. Two of the course participants, Afzal and Salma, (pseudonyms) who were already teaching in a private school, showed interest to conduct action research in their classrooms. Thus, I was involved as a mentor to facilitate their action research projects in the classrooms. I have begun the paper by giving a brief background of the study. Then, I have discussed the findings in terms of how my role evolved as a teacher educator during the fieldwork and how the research participants experienced action research in their classrooms, and what challenges are there when teachers initiate research in their classrooms.

Review of Literature

Action research involves a cyclic process. While carrying out action research, a researcher develops a plan of actions to improve what is already happening; acts to implement the plan, observe the effects of action in the context in which it occurs, and reflects on those effects as a basis for further planning in different cycles (Kemmis, McTaggart & Retallick, 2004). Being cyclic (Nawab, 2021; Kemmis, McTaggart & Retallick, 2004; Noffke, 1995) and a self-reflective inquiry (Zeichner & Gore, 1995; Avgitidou, 2019), action research helps practitioners to improve their practices and learn new insights. It helps practitioners in understanding theories, contexts, values, and practices (Haggarty & Postlethaithe, 2003). Alam (2018) found that in schools action research not only plays a key role in

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teachers' professional learning but also becomes instrumental to enhance students' achievements. According to Kemmis, McTaggart, and Retallick (2004), "action research can be seen as a method for practitioners to live with the complexity of real experience while, at the same time, striving for concrete improvement. It is a way of managing complex situations critically and practically" (p.2). Similarly, Halai (1999) argues that, "action research is seen as a vehicle to promote reflection and growth of the reflective practitioner entailing cycles of planning, implementing, observing and reflecting on one's practice" (p.65).

Action research has many advantages in bringing about change and improvement in practices. It has been seen as an important strategy in understanding things, changing self, others, and the context in which it is carried out (Mithani, Kramer-Roy, Dean, & Halai, 2005). In teachers' professional development, action research has a high reputation because of its focus on both the individual and social dimensions of schooling, and because of the context in which the action research is practiced (Zichner & Gore, 1995). As a result, action research has received overwhelming advocacy for the personal and professional development of teachers (Whitehead, 1989).

Numerous studies have highlighted the role of action research in teachers' professional development (Li, 2008). It involves reflective practice (Schon, 1983) that leads towards the development of understanding and improvement in practices (Costello, 2003; Winter, 1996). Action research is seen as an important element of both pre-service and in-service teachers' professional development (Nawab, 2021). For the prospective teachers, it plays the role of a bridge between their pre-service teacher education and in-service continuous professional development (Smith & Sela, 2005). Romano (2018) exerts that an action researcher generates knowledge through interpretation, reflection, and action in the field. Understanding the context and its parameters helps a great deal to generate contextual knowledge, which is seen as important to bring about improvement. Studies have shown that action research has a key role in the empowerment and transformation of individuals, groups, and coalitions (Hammad, Alunni, Alkhas, 2018) leading to professional growth and development (Niemi, 2019).

The Study

Action research was a core component of the Research Methods course in a teacher education program in our university. I taught the course and engaged the prospective teachers to put theories into practice and learn from their hands-on learning experience. There were 38 students in my class coming from various backgrounds; some of them were already teaching in schools and colleges and others did not have any teaching experience. Upon introduced to the Action Research component of the course, two of them showed interest to practice AR in their respective classrooms. Both of them had already been teaching in a private secondary school. The school had a purposeful-built building and had enough space around the building, where children used to play and get together for the morning assembly. There were 12 teachers including the headteacher in the school. Around 300 boys and girls with the ratio of 35% percent and 65% respectively studied in the school. One of the teachers was Salma, a female primary school teacher, having four years of experience. She had also attended several workshops through various in-service professional development courses. She carried out her action research in her Grade 5 Mathematics class. There were twenty-eight students in her class; fifteen boys and thirteen girls. The second teacher was Afzal, an experienced male teacher, having nine years of experience teaching. He had been teaching Mathematics in secondary classes. He had also attended several workshops in various subject areas. He planned to conduct his action research in class eight in the subject of Mathematics. In his class, he had twenty-seven students; four boys and twenty-three girls.

Both the research participants (Afzal and Salma) had received some theoretical understanding of action research in their research methods course in the university. Both of them were eager to ensure their students' participation in the learning activities in their respective classrooms; therefore, they came to me to facilitate action research in their classroom. It was voluntary participation. They reported that a few of the students used to take a leading role in asking and responding to questions; therefore, it was a challenge for them to involve all of the students in various classroom activities. Hence, through action research, Afzal and Salma wanted to involve all of their students in classroom activities through posing and answering questions and arguing socially. They decided to address this issue through an action research approach, and thus I planned my action research project to teach and support Afzal and Salma to carry out their action research in their respective classrooms.

The study was cyclic in nature, where I completed three cycles of action research in two semesters (nine months). I visited the research participants twice a month. During the visits, I used to spend time in lesson observations, giving feedback, co-planning, and sometimes demonstrating lessons in classrooms.

I used different qualitative research tools for data collection which involving lesson observations, semi-structured interviews, document reviews, and reflective journals. For instance, I developed detailed descriptions during the lesson observations. I developed my reflective journals based on the visits on regular basis. I collected documents such as lesson plans and action research plans of the research participants and reviewed them.

I analyzed the data in two ways; firstly, I was engaged in an ongoing data analysis during the fieldwork through reflective practice, and secondly, I did an overall analysis just after the fieldwork. During the data analysis, I went through my reflective journals, field notes, and document reviews several times and began to code the data under various categories. Later, I developed research memos, which became instrumental in the development of themes and sub-themes. I realized that the analysis of data in action research involved a to-and-fro process, where the researcher visits and revisits the data and modifies subsequent decisions based on concrete evidence.

Findings

I discuss the findings in terms of my experiences in various stages of the study and the roles that I played as a teacher educator and a researcher. I call those stages: a) conceptualization stage, b) implementation stage, and c) continuation stage. My roles were subject to the contextual realities and emerging academic and professional needs of the research participants. Therefore, as an action researcher and teacher educator, I saw my roles as teacher, co-teacher, and facilitator or encourager in the stages respectively. The following section sheds light on these themes:

Conceptualization Stage – Educator as a Teacher

My initial findings in the reconnaissance phase showed that the concept of action research was just at a theoretical level which both of the research participants had learned during the course work in the university. However, they had not practiced it before. Thus, it was important for the research participants to develop a full understanding of action research. Therefore, I planned to address this issue first. I call this phase the training phase, where I gave theoretical input to the research participants both in the university classroom as part of the course and separate mentoring in their school. In this phase, my role as a teacher educator was cooperatively active while giving theoretical and conceptual input. On the other hand, I enabled the participants to recapitulate their notions about action research. Thus, my role was to equip the research participants with theoretical knowledge of action research. In this stage, I experienced an asymmetric relationship of knowledge between me and the research participants; where my role was more active and dominant.

We began our work by reading and discussing theories on action research. The participants read literature at their home and the next day we discussed them aloud for further clarifications if any. In the session, I developed our discussion on their reading and understanding of the papers. Our discussion normally began with a recapitulation of educational research in general and action research in particular. We discussed various aspects of action research in terms of the very notion, its importance, and the process to carry it out.

The first issue that surfaced was managing teaching and research in the classrooms. When Afzal and Salma raised a question about the issue of balancing the duality of their roles as teachers and as researchers, I shared with them my own experiences of managing action research and also helped them in scheduling their plans according to their time and capacity. As research was not in the mandate of the school; therefore, the school management did not consider the action research project as a workload of Salma and Afzal. As a result, both of the participants began to incorporate action research in their daily routine practice. It, in fact, increased workload of Salma and Afzal, which they took as a challenge.

Besides, I also found that being novice action researchers Afzal and Salma needed support to maintain reflective journals and observation notes during the study. I, thus, conducted a session on how to maintain a reflective journal and record observations. In doing so, I also shared with them my reflective journals to give them an idea of maintaining their reflections. As reflections are generally very personal; therefore, for me, it was challenging to share my reflections with participants. In doing so, I was in a state of a dilemma. Firstly, Afzal and Salma could consider my reflections as models

and follow the pattern, which I did not want them to think so because there is always room for improvement. Secondly, my reflections generally had samples from the work of Salma and Afzal; thus, they could have felt the critique on their work. Nevertheless, I first made them realize that sharing of reflections was meant to learn from each other. I mentioned that nothing could be perfect, but we as teachers and researchers could learn from each other's experiences.

Based on the reconnaissance in their classrooms, Salma and Afzal listed several issues from their classrooms. They also asked me to help them select any core issue from the lists, which I accepted; yet my role was not to impose my decision on them. Thus through questions as a critical friend, I helped the participants to focus on a participial issue. The research participants thought of selecting any common issues to work together and give feedback to each other as critical friends. Thus, both of them felt that most of the students in their classrooms were passive and did not want to participate in the classroom discourses as active students. Both Salma and Afzal observed each other classes for further details to record the dynamics of the issues in the classes. They found that only fewer students in both the classes were active participants; whereas, the rest were hesitant to ask questions and to respond to them. Thus, Salma and Afzal planned their action research projects to involve the passive students of their classes in everyday classroom activities. Here my role was to educate the participants about lesson observations and developing observation notes.

Implementation Stage - Educator as a Co-teacher

Analysis of data from my reflections and field notes showed that after getting a theoretical understanding of action research, Afzal and Salma started to implement their own respective action research studies in classrooms. In this phase, my role slightly changed. I was not wearing the hat of a teacher; rather, I found myself as a co-teacher extending follow-up support to the research participants in their classrooms.

During the observations, I found that some aspects were common in both cases; for example, the issue of class control was prominent when Salma and Afzal began to implement their respective projects. It was observed that though most of the students began to respond yet their responses were in chorus, and sometimes the students started talking without listening to one another. As a result, the noise level was increasing. Afzal and Salma were a bit confused and disheartened due to this situation in their classrooms, and so they thought that their plans could not succeed. They also blamed the students for not fulfilling their expectations. For instance, Salma said, "You see sir, these students do not know how to behave. They do not take turns and listen to each other. I don't know how to develop their social skills" (Participant's Reflection).

I; however, encouraged Afzal and Salma to reflect on the issue of classroom management and control. This was, infect, the time when both of them started reflecting on their practices. I considered it a key step for action research. I helped them to reflect on their lessons from different perspectives. As a result of collaborative reflections, they decided to make classroom rules, norms, and values. For this purpose, they also involved students to develop those rules. They wrote the rules on charts and displayed them in classrooms so that the students could always remember those rules. I found Salma referring to those rules whenever there was a noise in the classroom. Over time, during the classroom observation, I noticed that the students were taking turns and listening to each other.

Similarly, my observations also showed that Afzal and Salma had difficulties in reflecting on their lessons. They were just making claims without proper reasoning and giving examples from their classroom events. For example, Salma wrote in one of her reflections as "the lesson was very much interesting for the students..... The students learned very well" (extract from Participant's Reflection). Here, the information as to why the lesson was 'interesting' and what was the evidence of students' learning, were the missing elements of the reflection. Therefore, I felt that there was a need for further input on creating a reflective stance. Hence, I again decided to give some more input on how to maintain a reflective stance through critically reflecting on one's actions. I also shared my reflections with them and developed a framework (a set of questions) as a tool to help them in reflecting on various dimensions of a lesson.

Although during the training session, Afzal seemed to be comfortable enough to conduct action research in his classroom, when he started to implement it in his class, he felt that he was not able to carry it out according to his plan. For instance, dealing with a large class was a challenge for Afzal. He shared with me in his reflections that it was challenging for him to implement a new initiative, that is, to ensure the passive students' participation in the classroom activities; because,

managing and controlling the class was a challenge for him. Afzal reflected that practicing something within a smaller group would give him enough confidence to use it in a large class. Thus, he decided that; initially, he would give tasks to the students in smaller groups and monitor their participation. He thought that upon developing the passive students' confidence in the smaller groups; he would allow them to share their learning with the large class.

I encouraged and supported him in his new plan. This way, Afzal was able to overcome classroom management issues over some time. Nevertheless, Afzal and Salma faced the problem of maintaining their classroom observations and they requested me to help them in enhancing their observation skills. Based on our collaborative reflection, I decided that Afzal and Salma would observe each other's classrooms and give feedback to each other. They thought that in that way they would be able to enhance their observation skills and also learn from each other's experiences. Besides, they also asked me to conduct some lessons in the classrooms so that they could also observe my lesson and develop their observation skills. I reflected on this situation and saw the advantages as well as the disadvantages of teaching in their classrooms and allowing them to observe my lesson. Firstly, I thought that they would consider my lesson as a demonstration or a model lesson in the classroom. My reflections show that conducting demonstration lessons in a class was not an easy job for me. I was once again in a dilemma! There were certain questions in my mind such as; what if the lesson would not go well. What would be the implications of it? Likewise, Salma could also perceive that particular lesson to be a model one and may want to follow it throughout. Thus, it could raise many issues. Secondly, teaching in one of their classrooms, allowing them to observe my lesson, recording the observations, and sharing them with me, would also enhance their skills of observation as an action researcher. However, as I had been to Salma's class several times before and I was familiar with her students and with her classroom culture; therefore, I felt comfortable in conducting a lesson in her classroom. Moreover, I also clarified that the lesson I would conduct in her class might not be a model lesson, but it could be a lesson to further critique for the sake of our reflections. Thus, I co-planned a lesson, discussed some observation techniques, and I taught a lesson in her classroom that was followed by a post-lesson conference.

During the post-lesson conference, Salma critiqued the lesson in the following way;

Teacher Educator: So, how did you see the lesson?

Salma: It was a very good lesson, Sir!

Teacher Educator: Why do you say so?

Salma: Actually during the lesson, the students were responding, thinking, guessing, and arguing!

Teacher Educator: I see! Anything that needed improvement in the lesson?

Salma: Sir, I think the lesson was very good; however, your pace of conducting the lesson seemed to be a bit fast. Some of the slower learner students might not get along with the pace and follow the lesson.

Teacher Educator: Great! How would you state your learning as a teacher through the lesson observation?

Salma: Sir, I learned that instead of following a written lesson plan, a teacher should follow the learning of the students. This is what I learned from your lesson.

The above citation shows how observation of my lesson helped Salma to reflect on the various aspects of the lesson as well as to enhance her observation skills. Here, I have played an active role as a teacher educator to make Salma record lesson observations, share her observations with me, and reflect on the various aspects of the lesson based on the observations. For this purpose, I asked questions and probed her further which resulted in reflection and reasoning. This whole process of co-planning, Salma to observe my class and then share her observations and reflections with me, helped her develop skills of observations and reflections, which are important for an action researcher.

Afzal and Salma also continued to observe each other's lessons and gave feedback to each other based on their observations to enhance their knowledge, skills, and expertise in doing action research in their classrooms.

In the lines below, I share one extract from his reflection on the lesson:

I made the students discuss the problem given to them in smaller groups, it ought the shy students would be able to discuss in smaller groups. In the beginning, they could not say anything. At that point, I encouraged the shy students to discuss in the small group. During

the group work wherever the students became stuck, I just posed questions to help them rather than answering. I noticed that participation in small groups, gave confidence to the shy students to share ideas with the whole class. (Extract from Afzal's Reflection).

When I felt that Afzal and Salma were able to continue their studies with comparatively lesser support, I changed the nature of my support. My role did not remain as that of a co-teacher; rather, it was more at an advisory level. The following section sheds light on it.

Continuation Stage – Educator as a Facilitator and Encourager

My work as a co-teacher in Afzal and Salma's classrooms in terms of co-planning, observing lessons, giving feedback, and conducting demonstration lessons seemed to become instrumental to enhance their understanding of carrying out their action research. With the enhanced understanding of the research participants, my role also evolved. I found that I was not extensively involved in co-planning, or demonstrating lessons, rather, I was there to encourage and facilitate them in making decisions and continuing their action research cycles. I decided to change my role when I felt that Afzal and Salma were able to continue their action research projects with comparatively lesser input from my side. My observations in the classrooms and the reflections from Salma and Afzal informed me in this regard. For instance, the following quotations are evidence of their confidence. In one of his reflections, Afzal said:

Initially, I did not know that teachers can research in their classrooms. When I started my research, I faced lots of challenges, but over time with the help of my educator, I was able to solve most of them. Now I am confident enough to try to solve classroom-related issues through AR. (Participant's Reflection)

Similarly, Salma also reported:

When I reflect on my learning, I can see many changes. My reflections show that initially, my students were passive learners. Through this research, I can make them more active and get them to participate in learning as responsible pupils. Initially, I used to face problems in carrying out action research and needed a lot of support to understand the concept and to carry it out. However, over time, I have overcome those challenges, and now, even if there are problems, I don't fear them, and I can look for alternative ways to solve them through action research. (Participant's Reflection)

In the above-given quotations, Afzal and Salma reflect on their learning of action research. They reflect that initially, it was a challenging task for them to conceptualize and implement action research in their classrooms; however, over time, they developed a repertoire of knowledge and skills of action research through practice under the support of the teacher educator. Both of the extracts from the reflections show the level of confidence in continuing action research in their classrooms and they also seem to be confident in solving the emerging issues and challenges without or with a little support from my side. Thus, I call this a stage of continuation, where teachers feel confident enough to institutionalize something in their classrooms.

Salma and Afzal seem to advocate the importance of action research for their professional development. They have looked at its advantages from various dimensions. Mostly, they have related its importance with the enhancement of students' learning, their understanding, and boosting up of their confidence. For instance, Afzal mentioned in his report: "I learned many things, which I had never done before; for example, reflection, observation, record keeping, and report writing. I have now realized that reflection is key for teacher learning and through action research, we can improve our students' learning" (participant's Reflection).

In the same way, Salma reflected on her experience and reported as:

I came to know that action research is very useful for learning and for making students' learning effective and durable. It gave me the confidence to resolve my classroom issues. People generally think that action research could be carried out in resourceful schools, but I have learned that it can also be applied in remote schools (Participant's reflection).

The two extracts cited above show that action research helped Afzal and Salma in making sense of their teaching based on reflecting deeply on their practices. Thus, this process not only helped the research participants to bring improvement in teaching but also enhanced the students' understanding. It broadened their perceptions about a 'teacher' and 'teaching' as well as enhanced their level of expectations from the students and helped them see their students as knowledgeable individuals who could learn anything through proper guidance and facilitation.

Nonetheless, Afzal and Salma also faced some challenges in carrying out action research in their classrooms. For example, Afzal said:

Action research needs lots of time for reflection, recording, and write-up. As a teacher, it is a challenging task to carry out smoothly. Time management is always an issue and it is a challenge for a teacher to cover the syllabus in time. (Extract from reflections)

Likewise, Salma stated:

Besides its importance, it also has some issues like time management, writing things down, and record-keeping. A teacher can face problems while teaching several classes in a single day. Thus, keeping a balance as a teacher and researcher is quite challenging. (Extract from reflections)

Thus, in the above-given quotations, Afzal and Salma highlighted issues in terms of balancing their roles as teachers and researchers due to time constraints. They had to simultaneously meet the demands of teaching and carry out action research. The issue of teaching several lessons in a day and meeting the system's demands was creating problems for them in balancing their roles as teachers as well as researchers.

Discussion

The findings in the previous section show the importance of action research for the professional development of teachers and teacher educators. Through triggering reflections, action research helped the practitioners (teacher educators and teachers) to make sense of reality and to plan things accordingly (Nawab, 2021). In other words, the action research project enabled the teacher educator to understand the realities of the context and the research participants and to plan activities according to the contextual needs (Mantra, 2019). The involvement of teacher educators and teachers in collaborative action research resulted in collaborative reflections (Sharma & O'Connell, 2007) and reflective practice (Schon, 1983), which have high regard for teachers' professional development.

Involvement in the action research highlighted the difficulties and challenges for teacher learning given the field realities in the remote context. Such findings reinforce those of other researchers in similar settings (Alma, 2018). As a result, it surfaced that teacher development is a complex, interwoven, and challenging process; therefore, teachers need much support to conceptualize innovations, implement them in classrooms, and continue them in the form of their routine work. In doing so, a teacher educator can play the role of a scaffold for them to sustain their innovations and support their learning.

Findings showed that there were three main stages of intervention in teaching action research to teachers. These stages were; a) helping the teachers to develop a conceptual understanding of action research, b) supporting them to develop and implement their plans in the classroom settings, and c) encouraging them to continue their practices in classrooms. In doing so, the role of a teacher educator was varying at each of the stages, that is, it began from being a teacher to the teachers (research participants), and then evolved into becoming a co-teacher in their classrooms, and then becoming a facilitator or encourager. Hence, fulfilling all these roles was a challenging, demanding, and hard task for a teacher educator to perform multiple tasks emerging from the contextual realities (classrooms). Similarly, it is evident that besides certain contextual challenges, action research played a significant role in enhancing the research participants' understanding of teaching and learning (Avgitidou, 2019). The research participants perceived action research as an important tool for their professional development that helped them not only in solving their classroom-related issues, but also enhanced the confidence and understanding of their students.

However, findings also show that conceptualizing action research and conducting it in the classrooms was a challenge for the research participants, who needed support, encouragement, knowledge, expertise, and skills in doing action research. Besides its advantages, the research participants experienced some challenges in terms of balancing their role as teachers and researchers in a typical school environment in Pakistan. They faced problems in managing time, observation, and data collection and analysis in various aspects of their roles. The findings raise certain questions and implications for using action research as a professional development strategy for in-service teachers in the country. The major emerging questions are: can we use action research as an approach for teachers' continuous professional development in the schools and the colleges of educations? Or more simply, can we afford to teach action research during in-service teacher development? If yes, then we will need to consider the content and processes of such programs. In this regard, we also need to

answer some further questions such as: do we have the manpower in terms of qualified and equipped teacher educators? How can we develop our teacher educators so that they would be able to support teachers in their action researches during in-service teacher education courses?

Similarly, there are also implications and questions for the structure of schools and colleges of education, where teachers and teacher educators perceive their roles as classroom teachers and research is seen as a complex task beyond their capability. In such a situation, a very basic question can also be asked such as: Are our teachers, teacher educators, and systems of education ready to adapt action research as an approach for professional development of teachers and teacher educators? What structural changes do we need to bring about in this regard? Certainly, both the systems would need support in terms of availability of time and space, resources and manpower, if they are serious about using action research as a strategy for in-service teachers' professional development. Teacher educators in various institutions will need to equip and qualify themselves with relevant knowledge and skills of doing and teaching action research. An experienced teacher educator can be a mentor to a novice teacher educator in his/her action research project.

Conclusion

This paper has highlighted findings of using an action research approach to teach action research. The study was conducted with two teachers in facilitating the learning and implementing their action research projects.

The findings of the study show that action research helps teacher educators in facilitating teacher learning while addressing contextual realities, yet it is a demanding approach. Teachers need extensive support in carrying out action research in their classrooms. As a result, the role of teacher educators becomes complex, demanding, and challenging. Making sense of action research, balancing their roles as teachers and researchers, and exercising reflective practice were some of the issues faced by the research participants while conducting action research in classrooms.

Findings showed that the process of helping teachers to conduct action research in their classrooms involves three stages: a) conceptualization stage; b) implementation stage; and c) continuation stage. The role of a teacher educator varies from one stage to another. It begins with taking the role of a teacher or mentor, to become a co-teacher or facilitator, and then to an encourager or a supporter.

As action research is also perceived as 'teachers' research'; therefore it is imperative to facilitate classroom action research in the schools. Though, the teacher education curriculum in the country has a component of action research; yet, just teaching about action research is not the panacea, it needs further support to make teachers' action researchers. Thus, supporting teachers in their classrooms to carry out action research is vital. Likewise, enabling teacher educators to carry out and facilitate action research needs considerations. Extensive training programs on action research for teacher educators would be needed. Therefore, Higher Education Commission (HEC) can play a key role through the provision of professional development opportunities to teacher educators in the context of action research.

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