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BUILDING CAPACITY OF TEACHER EDUCATORS TO IMPLEMENT ACTION RESEARCH: FEASIBILITY OF A LOCAL MODEL

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Abstract

In the area of in-service professional development programmes, action research is considered to be a tool for generating practical knowledge and bringing improvement in practices. Teacher could use action research as a process for professional learning, and to improve classroom practices, where students could be one of the beneficiaries. However, the task is challenging in a developing country like Pakistan, where the concept of classroom research is not well recognized. Therefore, responding to the demands of the changing world and knowing the significance of action research, AKU-IED had offered Action Research course to two cohort of participant under Strengthening Teacher Education in Pakistan (STEP) project. Two variants of intervention were implemented as part of this course including: (i) face to face only; and (ii) face to face with field support. All course participants (CPs) were practicing teacher educators with no research background, from distinct teacher education institutes of Sindh and Balochistan. This paper reports how much this course helped to improve CPs' knowledge and understanding about action research and explored their experiences and skills to implement action research in their workplace. In order to gauge participants 'knowledge and understanding' as well as 'experiences' of using action research in their context two assessment tools were administered before and after the course. The internal consistency of the knowledge test ($\alpha = 0.61$) and experience questionnaire ($\alpha = 0.87$) was found to be satisfactory. Data were analysed using appropriate statistical strategies to describe knowledge & understanding (mean) and to make comparison between two variants of the course (t-test, effect size). Overall, the result exhibits significant increase ($p < 0.01$) in mean test scores as well as confidence in implementing action research across two variants. However, the magnitude of this difference was comparatively bigger (test $r = 0.70$; experience $r = 0.91$) for face to face (f2f) and field support as compared to the face to face only (test $r = 0.37$; experience $r = 0.86$). In other words, field support seemed to have contributed positively in participant knowledge and reported skills of implementing action research. Based on these finding it is recommended that including action research course in teacher training programmes would be beneficial to nurture inquiry based culture in education. Furthermore, initial researchers would benefit more by scaffolding their learning through field support.

Introduction

In the area of in-service professional development programmes, action research is considered to be a tool for generating practical knowledge and bringing improvement in practices. Teacher could use action research as a process for professional learning, and to improve classroom practices, where students could be one of the beneficiaries. Action researchers have advocated the importance of action research as a mean to bring improvement at personal and institutional level. That is why action research is gaining popularity as a mode of practicing research among practitioners. Learning through action leads to personal and professional development (Koshy,

2005). Action research involves practitioner in rigorous cycle of planning, observation, action and reflection which can lead to change in practice, hence transformation (Kemmis and McTaggard, 2005; Koshy, 2005; Peters, 2004; Hopkins, 2001). Main aim of action research is to develop teacher's competencies through reflection-in-action (Schon, 1983) where teacher identify problems, reframe problem during action, analyze to suggest solution and construct new meaning for further action and plans. Hence, teachers are empowered by having ownership of the professional knowledge gained (Kang, 2007).

In recent years, action research has been adopted in teacher education programmes at university level. Though its importance is widely accepted, even then, the task is challenging in a developing country like Pakistan, where the concept of classroom research is not well recognized. Responding to the demands of the changing world and knowing the significance of action research, AKU-IED had offered Action Research course to two cohorts of participants under Strengthening Teacher Education in Pakistan (STEP) project. STEP is a multi-faceted intervention that seeks to improve the quality and delivery of elementary education services by strengthening the professional development and performance of teachers, teacher educators and education managers. The project is working in 7 districts of Sindh, 3 districts of Balochistan, and Gilgit-Baltistan. One of its major aims is to improve performance of teacher education institutions in providing quality teacher education. To fulfill this aim, 12-day short course in action research methods was designed to improve capacity of the faculty from teacher education institutions (Provincial Institute for Teacher Education, Government Elementary College of Education and Government College of Education) in Sindh, Baluchistan and Gilgit-Baltistan. All course participants (CPs) were practicing teacher educators with no research background, from distinct teacher education institutes. This paper reports how much this course helped to improve CPs' knowledge and understanding about action research and explored their experiences and skills to implement action research in their workplace.

The course aimed to help the teacher educators to enhance their understanding about action research as a method within the qualitative paradigm; and assimilate action research as a core function of their professional being. The course, therefore, helped CPs to, acquire basic knowledge and understanding about the action research method, acquire skills for undertaking small scale action research, develop proposal and conduct action research in their institutions to bring improvement in the identified area. 12 days short course was offered in three distinct phases: i) 8 days face to face (f2f) session at IED, ii) implementation phase in the field and iii) report submission and seminar in contextual clusters. STEP project has offered the course to two cohorts of participants (cohort I without field support and cohort II with field support). In cohort II faculty worked closely with small groups of CPs during f2f and field components.

Data collection tool and Analysis

Two assessment tools were administered to assess participants 'knowledge and understanding' and 'experience of using action research in their respective contexts. . The Knowledge test comprised of 10 multiple choice questions, covering the basic understanding of the term action research, teachers as researcher, phases of conducting action research and history of action research. The other tool was designed on a 4-point rating scale (1 = not confident at all to 4 = highly confident) to determine CPs expertise in different phases of carrying out an action research project i.e. from conceptualizing a study till report writing. In order to develop content validity the tool was reviewed by the research teaching team. The purpose of the review was to

establish whether the measurement scale covers the appropriate content to measure knowledge and understanding and explore their experiences. The reviewers were asked to make judgments according to their understanding of the definition of the items in the scale (Robson, 2002; Mertens, 1998). They reviewed the tool with reference to the 'aim of the course', 'appropriateness of content', and 'clarity of language'. They individually rated each item on a five point rating scale (1 = completely irrelevant; 5 = completely relevant). Reviewers were also requested to suggest any additions or deletions in the tool. In addition, reliability of the tools was established through Cronbach's Alpha (α). The internal consistency of the knowledge test ($\alpha = 0.61$) and experience questionnaire ($\alpha = 0.87$) was found to be satisfactory. Tools were administered at the beginning and end of the course (pre-post). Data were analysed using appropriate statistical strategies to describe knowledge & understanding (mean) and to make comparison between two variants of the course (t-test, effect size)

The overall result showed a significant difference ($p < 0.001$) between the pre ($M=4.2$, $SD=1.7$) and post-test ($M=5.8$, $SD=2.3$) scores of knowledge test. The difference was also found to be significant ($p < 0.001$) between the confidence-level of the participants in carrying out a research project at the beginning ($M=1.9$, $SD=0.57$) and end of the action research course ($M=3.1$, $SD=0.38$).

The findings from the pre and post-test results of both the variants (field support/No field support) shows a positive trend. There was a significant difference found in the pre ($M=4.2$, $SD=1.9$) and post-test ($M=6.3$, $SD=2.4$) results of the knowledge test score when a field support was given ($p < 0.001$); and between the pre ($M=4.2$, $SD=1.6$) and post-test score ($M=5.2$, $SD=2.1$) when there was no field support provided ($p < 0.01$) to the participants. However, the magnitude of this difference was comparatively larger for the field support ($r=0.7$) as compared to no field support ($r=0.37$). This shows that the element of the field support in an action research of such a nature contributes significantly to the knowledge of the course participants. A similar trend was found on the participant's expertise of conducting an action research study. The pre ($M=1.9$, $SD=0.58$) and post-test ($M=3.2$, $SD=0.40$) results was found to be significant when a field support was given ($p < 0.001$); and between the pre ($M=2.0$, $SD=0.57$) and post-test ($M=3.0$, $SD=0.34$) results of the same when there was no field support ($p < 0.001$). However, the magnitude of this difference was comparatively bigger for field support component ($r=0.91$) as compared to no field support ($r=0.86$). This shows that field support provided by the faculty during implementation phase helped CPs to reflect, re-plan and act more confidently as compared to the situation where they were working on their own. In other words faculty guidance during field work gave a better understanding of the process while action and reflection was in progress.

Findings and Conclusion

The study aimed to gauge CPs knowledge & understanding and experiences of developing and implementing action research project. Teacher educators from different teacher education institutes ($n= 86$) participated in the study. Overall, there is increase in knowledge score and CPs shared higher degree of confidence in developing and implementing action research after going through the whole process of working on action research project. The result exhibits significant increase ($p < 0.01$) in mean test scores as well as confidence in implementing action research across two variants. However, the magnitude of this difference was comparatively bigger (test $r = 0.70$; experience $r = 0.91$) for f2f and field support as compared to the face to face only (test r

= 0.37; experience $r = 0.86$). CPs have acknowledged the importance of action research as a method to bring improvement in the identified and targeted area.

It is worth knowing that CPs in cohort II with field support developed a better understanding of the process and reported to be at higher degree of confidence in developing and implementing action research plan as compared to cohort I. In other words, field support seemed to have contributed positively in participant knowledge and reported skills of implementing action research. Based on these finding it is recommended that including action research course in teacher training programmes would be beneficial to nurture inquiry based culture in education. Furthermore, initial researchers would benefit more by scaffolding their learning through field support. This study has contributed to an important aspect of teacher education at university level. It provides some interesting findings for the course developer at project level. Having said that, it is imperative for these teachers to continue using action research as a tool for improvement Attached to this is the motivation to work in group to bring improvement at institute level collectively.

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