Building Teachers’ Understanding of Classroom Action Research: A Rural Case Study in Indonesia

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Abstract

Indonesia Open University (UT: Universitas Terbuka) is a large, open university delivering distance education to students throughout Indonesia. An important aspect of its mission is to provide opportunities for Indonesian teachers to improve their education in-service. This includes two courses on classroom action research. In order to assess the effectiveness of these courses and, if necessary, improve them, a team of lecturers from UT conducted an investigation of the challenges teachers were facing in learning to conduct classroom action research through the UT modules. The team found that the modules did not adequately reflect an understanding of the actual characteristics of the teachers they were serving and were thus less effective than they might be in teaching teachers to conduct classroom action research. Changes in both the content and scheduling of the modules are recommended in order to more effectively promote classroom action research in Indonesian schools.

Key Words: Classroom Action Research, Distance Education, Indonesia, Teacher Development

Introduction

Indonesia is a country long known all over the world for its tourist destinations, such as the tiny island of Bali, but social and political developments off the tourists’ radar have been transforming Indonesia since the end of the Suharto regime in 1998. As democracy takes hold in Indonesia, corruption, which has long been a problem, has become a top issue that attracts domestic and international scrutiny. Over the last few years terrorist bombings have attracted further negative attention. Poverty remains a serious concern. In the streets and boulevards of Jakarta, where (in 2010) 14,464 persons per square kilometer live, you can easily find the most extravagant, the most expensive, cars (Wikipedia 2011). But your eyes cannot escape the spectacle of people crowding in the bus, in the train or even on the top of the train. Millions of rupiahs can be spent in minutes anywhere in the town, while nearby people live in the streets under dire circumstances, earning a few hundred rupiahs when the minimum cost of living is several hundred thousand rupiahs. The country is struggling to improve, however, in a number of respects. The rate of population growth is down, as is the dependency ratio (Firman 2011). The economy continued to grow right through the 2008-2009 worldwide economic downturn, though the distribution of wealth continues to be heavily skewed in favor of a tiny wealthy...
minority (Suhartono 2008). And after decades of authoritarian government the process of democratization continues as steps are taken to decentralize some forms of government decision-making to the provinces and other levels of local government closer to the needs and interests of the people (World Bank 2005).

Educational Development in Indonesia

The education sector of Indonesian society has undergone considerable change during this period as well. As with other agencies of Indonesian government, the national policy on decentralization has led to a shift of both responsibility and control of key elements of educational policy and practice to the provincial and district levels where, it is believed, educational decision-making can be more responsive to local needs (Bjork 2003). Funding levels have increased markedly as well (Franken 2011). One result is that access to basic education, long a problem for the people of Indonesia, has improved significantly (Handayani, Soewartoyo, and Sukarno 2009).

Figure 1 shows that the uneducated portion of school-age population (6-25 years old population) is predicted to decrease from 53 percent to 11 percent in the period of 1980-2020. In the same period, gains in a primary education is predicted to increase from 34 percent to 52 percent, while gains in high school are predicted to increase from 11 percent to 32 percent and for higher education gains, though meager, are predicted to increase from 2 percent to 5 percent.

Figure 1. Percentage of School-age Population (6-25 Years Old Population) in Terms of Highest Education Achieved

Improving the quality of education available to Indonesian children remains a challenge, however. Here, too, though the Indonesian government has taken important steps to make improvements, especially in the area of teacher quality. In 2005, for instance, legislation was passed requiring all new and existing teachers to hold an S-1, or baccalaureate, degree (Setiawan 2009). Until that time, it was possible for individuals to enter the teaching profession with only two or three years of college-level training, a situation most common in remote, rural schools. With the passage of the new law, however, the Indonesian government and international educational development organizations have collaborated on massive in-service teacher development initiatives intended to improve teachers’ skills and assist them in earning their S-1 degree (Education Development Center 2011). These initiatives have included efforts to train teachers to use active learning strategies in their classroom and to use classroom action research as a mechanism for critically appraising the success of their efforts in the classroom and, where necessary, taking steps to modify their practices in order to improve student achievement.

Action Research

Action research is a method of inquiry designed to systematically gather information relevant to problems of practice and then to use that information to more effectively direct practice in the direction of desired ends (Stringer 2007). It is used in fields as diverse as social work (Kwok and Ku 2008; Clover 2011), public policy (Holt, Nachtwey, and Dörre 2010), engineering education (Chang, Wang, Chen, and Liao 2011), and pharmacy (Ngwerume and Themessl-Huber 2010), among others. It has also become ubiquitous in education, particularly as a technique for diagnosing problems and improving classroom instruction (Goswami and Stillman 1987). Thus, it is no surprise that classroom action research has become a prominent issue in teacher training in Indonesia over the past decade. It is now widely seen as a potentially important tool for the continuous improvement of teaching at the classroom level and the development of reflective, professional educators at all levels of Indonesian education. Action research is now therefore a mandatory part of the pre-service training of Indonesian teachers because it contributes to the professionalization of lecturers and teachers in concrete ways.

The aim of an action researcher is to bring about development in his or her practice by analyzing existing practice and identifying elements for change. The process is founded on the gathering of evidence on which to make informed rather than intuitive judgments and decisions. Perhaps the most important aspect of action research is that the process enhances teachers’ professional development through the fostering of their capability as professional knowledge makers, rather than simply as professional knowledge users. In an age of decentralization and the proliferation of national guidelines and strategies, action research can help teachers feel in control of
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...their own professional situation. (Waters-Adams 2006, Part I, Sec. 3)

Moreover, the new policy requiring all in-service teachers to earn a baccalaureate degree places even more attention on classroom action research as it is the most commonly used approach to completing the thesis (skripsi) required of all undergraduates. Thus the attention on action research is high, but the quality of training available to teachers is uneven and may not be up to what is proving to be a difficult task for many teachers.

Action researchers work in the hurly-burly of their own practice. Monitoring closely this practice as they are acting within it demands space and time which, almost by definition, the practice does not give easily. It is therefore difficult to maintain rigor in data gathering and critique . . . . They can give a false sense of regularity to the teacher. McNiff (1988) has pointed out that action research is a messy process . . . with forays into territory only partially related to the main focus of study, aborted lines of inquiry and continual refocusing. Hopkins (1993: 54-55) criticizes the tight, orderly representations of Elliott, Ebbutt and McKernan as having the potential to ‘trap teachers within a framework which they might come to depend on and which will, consequently, inhibit independent action. (Waters-Adams 2006, Part IV, Sec. 1)

This messiness and need for constant improvisation makes classroom action research particularly difficult for Indonesian teachers who, for decades, have been socialized to do what they are told rather than think for themselves (Bjork 2004).

We know that practice is always influenced by context. In the words of Wilfred Carr and Stephen Kemmis (1986), we need the improvement of practice, the improvement of the understanding of practice and the improvement of the situation in which the practice takes place. Jack Whitehead (1985, 98) puts forward five simple steps in this process:

1. I experience a problem when some of my educational values are negated in my practice.
2. I imagine a solution to my problem.
3. I act in the direction of the solution.
4. I evaluate the outcomes of my actions.
5. I modify my problems, ideas and actions in the light of my evaluations.

The act of finding our own solution makes us understand our practice better—not only what we are doing, but also the factors that affect what we do. Action research therefore has two aspects, the most important characteristic of which is that, in both aspects, we must be open, honest and rigorous. The starting point is to sort out a problem or issue in practice; to this extent an action researcher seeks a solution. This is in itself not a simple matter for it, as is mentioned by Stephen Waters-Adams (2006), “demands space and time . . . . therefore it is difficult to maintain rigor in data gathering and critique” (Part IV, Sec. 1). But the process of sorting out a problem or issue can also be used as a deliberate attempt to understand practice better—a traditional research attitude. This step might be a simple step once we know what we know and what we need, then it seems only technical problems remain. But, in Indonesia, where culture matters, when reading habits for example are still a problem, this second step is also hardly simple.

Indonesia Open University (UT: Universitas Terbuka) is playing an important role in these efforts to improve Indonesian education. Established in 1984, UT is the only distance education university in Indonesia. It currently serves around 500,000 students in 37 provinces, delivering instruction at a distance by providing self-instructional course materials, printed or otherwise and, if it is needed, province-level tutors. UT includes four faculties (i.e., Faculty of Science [FMIPA], Faculty of Social and Political Science [FISIP]), Faculty of Economics [FEKON]) and Faculty of Teacher Training and Education [FKIP]); however, the current demand for in-service training created by the S-1 mandate for all teachers means that the FKIP is by far the largest of UT’s four faculties. It offers a broad range of courses leading to the completion of the S-1 degree, including action research courses. These is (a) a classroom action research (PTK) course that is delivered in the sixth semester of students’ program of study with an emphasis on action research theory and (b) a course on enhancing teaching professional skills (PKP) that is delivered in the tenth semester focusing on teachers conducting action research in two subject areas, one in natural science, and the other in social sciences.

Purpose of the Study and Methods

UT periodically reviews the content and delivery of its courses in order to determine whether they are successfully meeting the needs of its students. This regular task, along with the heightened emphasis on classroom action research in Indonesian education as well as the anecdotal evidence suggesting in-service teachers are having a particularly difficult time completing their skripsi, led a group of UT lecturers to conduct an action research project (Stringer 2007) to determine whether the action research courses offered by UT are successfully enabling teachers to conduct action research in their own classrooms. The core reason we went through all this messy business was because we wanted to make
our own practice better. We worried that things might not be going as we wished and wanted to make improvements, but we were unsure how to do it effectively. We wanted to sort out these concerns and identify practical solutions. We knew that someone else’s solution may have merit, but we also knew that solutions that work in one context may not be quite right for the individual situation within which we work.

In building our understanding of the teaching of action research at UT, we first tried to (1) examine the challenges that tutors encounter in preparing UT’s student teachers to do classroom action research using the classroom action research module (PTK) and the classroom action research implementation guideline (PKP), so that based on the results of the examination, we would be able to (2) make recommendations for improving the distance education mode of the classroom action research curriculum and its implementation.

To accomplish these goals the UT research team designed and carried out an action research project involving multiple cycles of problem identification, data collection, data analysis and problem clarification in order to understand the challenges tutors and teachers were facing in their use of the action research modules (Kemmis and McTaggart 2000). Data collection methods included semi-structured interviews with tutors and teacher-students, focus group interviews with teacher-students, observations of tutorial sessions, and a questionnaire distributed to teacher-students. Table 2 below summarizes the data collection methods used in each research site as well as the number of subjects from whom data was collected.

### The Research Findings

In our first cycle of data collection we found that in the first four tutorial sessions (September-October 2008), the students had not yet had an opportunity to practice classroom action research, let alone write an action research report. In our observation of these first sessions we found that the tutor, a young, energetic man, explained aspects of classroom action research and posed questions about the content of the module to his class of approximately 30 teacher-students. The students seemed to be enthusiastic, asking and answering some questions dealing with their experience about action research. However, our interviews with teacher-students suggested that, for many, their knowledge of classroom action research was largely theoretical, while for others their understanding was clearly incorrect. In the fourth PTK tutorial, for example, some students still perceived remedial teaching and guidance and counseling as classroom action research. “Indirectly, I did classroom action research. I taught my students who still cannot read to have some additional instructions after school hours” (Teacher-Student Interview, Cicurug, September 2008). Another student said, “We used to call it guidance and counseling for higher or lower achiever students” (Teacher-Student Interview, Cicurug, September 2008).

### All of the sites of the research were in the provinces of Banten and West Java, one of the most heavily populated provinces in Indonesia. The research sites—Cicurug, Cibinong, Parung, and Tangerang—were selected in part for ease of access by the research team as well as access to teacher-students serving predominately rural schools and students. We deliberately sought a rural-serving population of teacher-students because such teachers, on average, have lower levels of academic preparation than their urban counterparts, thus the difficulties they encounter in the action research modules may be different. In addition, our research was intended to complement that of a second action research team from UT investigating the action research modules in more urban settings. The schools these teacher-students serve tend to have lower than average levels of income and education. They are often located quite far away from shopping centers or from other city activities, such as organized or semi-organized leisure activities, governmental activities, etcetera. The sense of “ruralness” of the sites can be further illustrated from the fact that the students who came to the tutorial sites in, for example, Cicurug, are teachers in rural areas serving elementary students who mostly come from lower income families (e.g., farmers, blue collar laborers, etc.).

#### Table 2. Data Collection

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Center</th>
<th>Observation</th>
<th>Interview</th>
<th>Survey</th>
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<tbody>
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<td></td>
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<td>Class</td>
<td>Tutor</td>
<td>Student</td>
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<tr>
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<td>Cicurug and cibinong</td>
<td>2</td>
<td>1</td>
<td>10</td>
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<td>2</td>
<td>Parung and Tangerang</td>
<td>1</td>
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<td>15</td>
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<td>3</td>
<td>Parung and Tangerang</td>
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All interview and focus group data were recorded and transcribed for later analysis. Observational data was recorded in the form of field notes taken during the course of actual observations. At the end of each cycle of data collection, members of the team met to conduct a holistic analysis of the data, looking for patterns or themes emerging from the data that might help clarify issues tutors or teacher-students were having with the action research modules. These patterns were then used to guide subsequent rounds of data collection.
weeks of instruction in the tutorials, we returned to Cicurug for a second round of data collection. After conducting a focus group discussion with teacher-students, we found that confusion of remedial teaching and classroom enrichment activities with classroom action research was common. Teacher-students also seemed hung up on the idea that classroom action research required research funding that was not available to them. “In my school, conducting PTK is not compulsory. It is suggested by the principal, and the school may provide some financial assistance (PTK Teacher-Student Interview, Cicurug, October 2008). Another said, “I didn’t do classroom action research since in my situation, I had financial problem” (PTK Teacher-Student Interview, Cicurug, October 2008).

Some teacher-students appeared to be optimistic about the usefulness of classroom action research to solve the learning difficulties, particularly for students with disabilities: “In my class, there are two disabled students and I know that I can solve their problems by using PTK” (PTK Teacher-Student Interview, Cicurug, October 2008). However, misunderstandings of classroom action research were still common. “I do not do it in cycles. I simply give those under achievers extra teaching after school time” (PKP Teacher Student Interview, Tangerang, October 2008). Even those students who had conducted classroom action research were not confident that they had received enough feedback from their tutors to do classroom action research correctly. “Even though we had already made a PTK report we still wanted feedback to know whether it was right or wrong. But we did not have the feedback from our tutor (Teacher-Student Interview who had passed PKP course, Tangerang, October 2008).

Rather than the growing understanding of classroom action research that one might expect after several weeks of instruction on the topic, our interviews and focus groups revealed continued confusion. Some teacher-students were still unable to distinguish the process of classroom action research from routine classroom interventions—extra time, for instance—that could, conceivably, result from classroom action research. Others seemed to be developing a conception of classroom action research as an elaborate technical activity separate from everyday classroom practice and requiring financial resources that they did not have. Even those who said they had conducted classroom action research before were unsure whether they were doing it correctly. All wanted explicit instructions from the tutor.

The problems the teacher-students face seem to be coming from two sources. The first set of problems arises from the module study materials. Teacher-students report there are not enough concrete examples of an action research proposal or an action research report in the study materials. The students thus feel the materials to be too theoretical and difficult to understand. Conducting classroom action research is not required in the first PTK, tutorial. Only writing a proposal for a classroom action research project is required. The two classroom action research modules were designed on the assumption that teachers would conduct classroom action research independently between completion of the first tutorial and enrollment in the second, PKP, tutorial, which was intended to teach them to write a report of a classroom action research project. This independent practice does not seem to be happening, thus the teacher-students interviewed here want the PTK and PKP tutorials to be offered closer to each other. They also feel the nature of the course requirements and the final examination is not consistent with the nature of the course:

Doing classroom action research should be included in the PTK course in order to make the students have an understanding about it. (PTK Tutor Interview, Cicurug, October 2008)

Only after taking the PKP course do we understand more about classroom action research. (PKP Teacher-Student Interview, Tangerang, October 2008)

The PTK course should be given closer to the PKP course to help the students remember it. (PKP Course Tutor Interview, Cicurug, October 2008)

We have to repeat teaching the elementary student teachers again about classroom action research in the PKP course since they forget what and how to do it. (PKP Course Tutor Interview, Tangerang and Cicurug, October 2008)

The second set of problems comes from several facts relating to the students themselves. When taking PTK they have difficulties because it is their first semester as distance learners at UT. They have difficulties in trying to adapt to a strange, but more flexible learning requirement in distance mode. Eighty percent of students responding to our questionnaire indicated this was an issue. Moreover, 80 percent of the students also felt that the eight tutorial sessions were not enough to fully understand classroom action research theoretically and practically, though 78 percent of students admitted that the PTK tutorial improved their understanding of classroom action research. Another hindrance to learning to conduct classroom action research in the PTK tutorial perceived from the student side is what they felt to be an overcrowded curriculum. They feel they do not have enough time to do the classroom action research. “Actually, I want to do the action research for my class but I have the obligation to finish all

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the learning materials for my class” (PKP Teacher-Student Interview, Tangerang, October 2008).

Finally, tutors and teacher-students report considerable difficulty in writing what they perceive to be a scientific paper. “Writing a scientific paper is difficult work for the students because they aren’t used to it” (CAR and PKP Tutor Interview, Cicurug, October 2008). One teacher reported “it is difficult to write what we feel. It takes time to write” (Teacher-Student Interview, Tangerang, October 2008). Another tutor reported that “students are weak in Bahasa Indonesia. There is no subject or predicate in their written sentences” (CAR and PKP Tutor Interview, Cicurug, October 2008).

Using similar strategies as those used in the second cycle, our third cycle of data collection found further nuances of students’ difficulties in understanding and practicing action research. Some students still have concerns about the details of research funding and observation sheets, while others report difficulties in differentiating between, let alone writing, an action research proposal or a report of action research. In short, the students seem to have all sorts of reasons why they cannot conduct classroom action research.

How to make a budget plan and an observation sheet? We found it difficult in study time management including to write the PTK proposal, to do the PTK and to write the PTK report since I have a lot job to do. It is difficult to write action research proposal because we are not used to write. What are the step by step way to write a PTK proposal and a PTK report? What are the differences between PTK proposal and the PTK report? It is difficult to manage their study time to write the PTK proposal, do the PTK and write the PTK report. (PTK Student Interview, Tangerang, November 2008)

In our surveys, 80 percent of students in Tangerang felt that they needed the tutor’s assistance in writing a PTK proposal and report. Eighty percent said that they need to have more hands-on tasks such as conducting classroom action research and writing about it in order to understand action research theoretically and practically. Ninety percent reported that their participation in the tutorial, which is not required, was essential to improving their understanding of classroom action research.

In sum, our investigation of the challenges teacher-students and tutors are encountering in learning to conduct classroom action research through the two UT modules suggests that teacher-students are developing a conception of classroom action research as a complicated “scientific” research project requiring proposals, research budgets and technical reports rather than an everyday, often intuitive, examination of classroom activity in order to improve it. While action research can, of course, take the form of a larger, more systematic research project that aims to improve practice in classrooms and other settings or contribute to the development of theory, it probably should not be introduced to teachers in this form. Doing so pushes the tension inherent in any effort to learn a new skill to the point where the teacher-learners are convinced that they cannot conduct classroom action research because they do not know how to write a proposal, they do not have sufficient funding, and they cannot write a “scientific” paper. It also exacerbates an already prevalent tendency among in-service teachers who may have come of age professionally in a highly centralized and hierarchical system to want to be told what to do (Bjork 2003). The end result is that many participants in UT’s action research tutorials are not learning to do classroom action research effectively.

**Conclusion and Recommendations**

Returning back to the two aspects of action research mentioned earlier—messy ways of knowing ourselves and a deliberate attempt to understand practice better—we certainly should admit that even the researchers themselves have difficulties in focusing and acting on certain issues or problems. The journey to understand something is always long and winding and always under construction. We do not always know which way we should take. Therefore, it is understandable that our own students have difficulties in grasping what action research is, let alone practicing it in their daily teaching-learning situation.

However, amid all those confusions, certain findings are undeniable. It starts from the timing of the PTK course, which is four semesters away from the PKP course. So many misunderstandings breed in the minds of the students. So many things are forgotten in this period of time so that when students take the PKP course, they have to re-learn the action that they supposedly learned to do in the PTK course. The independent practice that the module developers assumed would be happening between the first and second action research courses does not seem to be happening; therefore, scheduling the practice module (PKP) immediately after the theory module (PTK) would help. However, more needs to be done than simply a change in module scheduling. Much more attention to the needs of actual students is in order.

The students would clearly benefit from more concrete examples of classroom action research in the PTK module, for instance. They are not as able to move from the description of a practice to actual practice as the current module assumes. The modules, and the tutorials in which they are presented, may also need a much greater emphasis on classroom applications of action research through the two UT modules suggests that teacher-students are developing a conception of classroom action research as a complicated “scientific” research project requiring proposals, research budgets and technical reports rather than an everyday, often intuitive, examination of classroom activity in order to improve it. While action research can, of course, take the form of a larger, more systematic research project that aims to improve practice in classrooms and other settings or contribute to the development of theory, it probably should not be introduced to teachers in this form. Doing so pushes the tension inherent in any effort to learn a new skill to the point where the teacher-learners are convinced that they cannot conduct classroom action research because they do not know how to write a proposal, they do not have sufficient funding, and they cannot write a “scientific” paper. It also exacerbates an already prevalent tendency among in-service teachers who may have come of age professionally in a highly centralized and hierarchical system to want to be told what to do (Bjork 2003). The end result is that many participants in UT’s action research tutorials are not learning to do classroom action research effectively.
research rather than action research as a broader form of inquiry. Students should come to see classroom action research as a better way of doing what they are already doing rather than an additional burden requiring funding, proposals, “scientific reports” and other resources and skills they do not have. Finally, there should be many more opportunities to practice what is being learned in both modules. Ideally, such opportunities to practice should come with explicit support from tutors experienced in conducting action research. Incorporating such changes, we believe, would make the UT action research modules more responsive to the needs of UT’s students and thus increase the likelihood that those students will learn to conduct classroom action research effectively in their own schools.

References


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