CONDUCTING ACTION RESEARCH IN INDONESIA: ILLUSTRATIONS AND IMPLICATIONS

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Abstract

In this article we discuss some of the key features of action research (AR) and how it can be applied in the educational context. We then describe how principles of AR were used in the Indonesian context with ten high school teachers as a professional development experience to encourage the teachers to reflect on their teaching and to introduce changes into their classroom practices. The teachers reported that, in contrast to previous professional development, AR provided them with a powerful means of professional growth as it was closely related to their own teaching situations. It also created changes and innovations in their teaching practices that they believed led to more effective classroom activities and teacher-student interactions. Nevertheless, they also reported various difficulties associated with undertaking research in the classroom. We conclude the article by presenting a case study to illustrate in more detail how AR was conducted by one of the teachers and what changes occurred in her teaching. The article also draws out implications of the study for teacher education in Indonesia.

Keywords: action research, Indonesian context

INTRODUCTION: WHAT IS ACTION RESEARCH?

In recent times, the field of English language teacher education has seen a number of developments aimed at enhancing effective approaches to professional development. Amongst these developments has been the concept of a tranformative, rather than a transmissive philosophy of teacher education (Richards & Farewell, 2005; Freeman, 1998) which involves teachers taking an active involvement in investigating and exploring their own teaching (see for example, Richards & Farrell, 2005). Action research is part of this broader movement. It is associated with the concepts of "reflective practice" (Zeichner & Liston, 1996) and "the teacher as researcher" (e.g., McKay, 2005). It involves a self-reflective, systematic and critical approach to classroom investigation by participants–in this case teachers–who are also members of the research context.

In AR, participants seek to identify problematic situations, issues or puzzles in teaching (Allwright, 1993) that they wish to probe further through data collection and analysis. They then intervene in those situations in order to bring about changes in practice that are critically informed by the new knowledge gained from data collection. The interventions are further observed to identify what effects they have on classroom practice and changes may be introduced as a result of this observation. For example, researchers may decide to investigate aspects of teacher or learner talk, task-based learning, the teaching of specific skills (reading, writing, grammar and so on), classroom dynamics or classroom materials. Research methods for collecting AR data are primarily qualitative and include, for example, classroom observations, interviews, journals or surveys (see Burns, 1999 for a range of approaches to data collection).

There are several essential features that distinguish AR from other forms of educational research. First, it is small-scale, contextualised and local in character, identifying and investigating teaching-learning issues within a specific situation. Second, it involves evaluation and reflection aimed at bringing about changes in practice. Third, it is participatory, providing for communities of participants to investigate collaboratively issues of concern within their social situation. Fourth, it differs from the "intuitive" thinking that may occur as a normal part of teaching, as changes in practice are based on systematic data collection and analysis. Finally, AR is underpinned by democratic principles; it invests ownership for changes in curriculum in those who are part of the community of practice and are involved in conducting the research.

Action research typically involves four broad phases in a research process that forms a continuing cycle or spiral of research and action:

- Planning–a problem or issue is identified and a plan of action is developed in order to bring about improvements in specific areas of the research context;
- Action–the plan is put into action over an agreed period of time;
- Observation–the   effects of the action are observed and data are collected;
- Reflection–the effects of the action are evaluated and become the basis for further cycles of research (based on Kemmis & McTaggart, 1988).

THE CONTRIBUTIONS OF ACTION RESEARCH

Action research is still relatively new in the field of language teaching, although interest in it on the part of policy makers, teacher educators, teacher training organisations and teachers themselves has developed rapidly since the early 1990s. Even so, the literature on AR is still rather limited (see Burns, 2005a for a state-of-the-art review). In addition,

AR is sometimes seen as having an uncertain status as a research methodology, and it is sometimes subject to criticism about its validity, reliability, and generalisability, so that its potential benefits as a research approach and its contributions to professional development are yet to be fully understood (see Burns, 2005b).

However, some writers (e.g., Crookes, 1993) have pointed out that as AR is a flexible approach to research and professional development, its applications to the field of language teaching are potentially numerous. Among the ways that have been suggested that AR can be used are:

- to provide an impetus for individual and group action and to elucidate immediate teaching or learning problems (Nunan, 1990; Wallace, 1998);
- to facilitate continuing professional development and teacher education (Richards & Nunan, 1990; van Lier, 1996; Freeman, 1998);
- to underpin educational change and innovation (Goswami & Stillman, 1987; Markee, 1997);
- to play a role in the evaluation of teaching and learning programmes (Murphy, 1996);
- to stimulate school and organizational renewal (Elliott, 1991; Burns, 1999);
- to promote researcher and teacher partnerships (Somekh, 1994);
- to support broad educational trends towards school-based curriculum development (Hopkins, 1993).

As the research focus is on the classroom and on immediate practical concerns in teaching, AR also holds promise as a site for building theories about language teaching which are potentially of value and interest to other teachers (e.g., Freeman, 1998).

In this article our interest is, specifically, on how AR can be used to provide an impetus for individual and group change, to highlight and address immediate teaching or learning problems, and to facilitate and renew professional development and teacher education in the Indonesian context. We aim to illustrate these various aspects of AR as they might apply in Indonesia by describing a recent research project undertaken by one of the authors of this paper (Rochsantiningsih, 2005) and a group of secondary school teachers in Indonesia.

THE STUDY

The study aimed to explore the following areas:
1. teachers' perceptions of whether their involvement in AR enhanced their professional development;

2. teachers' perceptions of whether their involvement in AR affected their classroom practice;
3. teachers' perceptions of whether their involvement in AR influenced their students' learning;
4. difficulties that teachers encountered as they carried out their AR projects;
5. the kinds of support structures that teachers needed as they undertook their AR projects.

In this article, we focus on areas 1, 2 and 4.

The research took place in Surakarta, Central Java, in seven public high schools. Ten teachers between the ages of 33 and 54 were involved, two of whom were from the same high school. There were another three who also all worked in the same high school. Three of the teachers were male and seven were female and all had undergraduate qualifications in English. Their teaching experience ranged from seven to 25 years and they taught in Year 1-3 classes which focused on a range of skills, including reading, speaking/oral skills, and structures. According to a questionnaire and interviews administered before the start of the project, most of the teachers were unfamiliar with the concept of AR. Only one teacher indicated that he had conducted AR, which had been supervised by a senior teacher, at his previous school. The teachers and the researcher undertook a series of activities over a period of six months to introduce the teachers to the concepts of AR and to investigate the impact of these activities on the teachers' practices. Table 1 illustrates the sequence of these activities:

Table 1: Time frame and activities in the project

Time frame (2002)	Structure/Focus	Programs
2 weeks 1–17 Feb	Preparation	To introduce the research plan, make contacts, and obtain consents from the teachers and the principals.
1 week 7-14 Feb	Background information	To gain preliminary information on the teachers' perceptions about PD and their prior knowledge of AR.
1 day 19 Feb	Workshop 1	To assist teachers to gain knowledge on the nature of AR and to develop skills in research methodology, especially AR; and to develop a strong commitment on the part of the teachers to conduct AR on their teaching practices.
1 week	Follow up activities by teachers	
1 day 26 Feb	Workshop 2	
1 week	Follow up activities by teachers	
1 day 5 March	Workshop 3	
1 week	Follow up activities by teachers	
1 day 12 March	Workshop 4	
1 week	Follow up activities by teachers	

1 week:17-24 March	School break	
14 weeks 25March–29June Implementation of AR by teachers in their classes	W1: Start AR projects W3: Group discussion 1 W5: Group discussion 2 W7: Group discussion 3 W9: Group discussion 4 W12: Complete AR reports W13: Complete posters and papers W14: Poster presentation and seminar	To assist teachers in implementing of AR, discussing the AR progress, writing the report, and developing presentation.
2 weeks: 1-14 July	School break	
1 week: 26–31July	Back-to-school study	To investigate the impacts of AR on teaching.

Once the teachers had been introduced through workshops by the researcher to the main steps and concepts in AR, the second half of the project involved identifying their own research issues and implementing the research at their schools over a period of 14 weeks of the third school term. The teachers chose a variety of topics, relating to issues that they perceived to be problematic or troublesome that they wished to solve or change. Table 2 indicates the range of issues that were selected for investigation by the teachers.

Table 2: Research topics investigated by the teachers

Teachers	Research Topics
Teacher A	Teaching speaking outside the regular classroom
Teacher B	Increasing students' motivation through games
Teacher C	Choosing teaching materials for a tired teacher
Teacher D	Optimising brainstorming in teaching speaking
Teacher E	Using translation to improve students' reading comprehension
Teacher F	Improving students' ability to identify main ideas in paragraphs
Teacher G	Preventing cheating and promoting students' motivation
Teacher H	Negotiating lessons with students
Teacher I	Improving students' preparation for tests
Teacher J	Increasing students' motivation through games

To collect data for their research, the teachers were asked to write a diary as soon as possible after a lesson was completed. Diary writing was selected as it would capture the teachers'main concerns and activities, did not require any additional equipment, such as cassette recorders, and as a data collection tool, it is widely used in AR. Isakson and Boody (1993, p. 29) suggest that: "…recording observations as soon as possible is essential because this provides quality primary data for later reflection".

During the period of AR, Rochsantiningsih visited the schools once a week and interviewed the teachers individually. Each teacher interview was audiorecorded. In addition, she conducted fortnightly group meetings where the teacher researchers reported on individual progress and discussed

the key issues with their colleagues. The researcher kept her own diary to document her reflections on the interviews and also audio-recorded each of the teacher meetings. Each teacher was asked to prepare a report on their research at the end of the project and they also gave presentations through poster displays and talks at a seminar held in one of the high schools. In a follow-up phase, the researcher visited each teacher after a two week break at the end of the third term to discuss the impact the research had had on the teacher researcher and to investigate whether the teachers had plans for further AR.

FINDINGS

Teachers' Perceptions of Whether Their Involvement in AR Enhanced Their Professional Development

Although the responses to the experience of conducting AR varied amongst the teachers, all ten indicated that AR had contributed to their own development as professionals. The main changes related to: enhanced awareness-raising, feelings of self-improvement as teachers, a greater sense of professional empowerment and autonomy and gaining new knowledge. For example, Teacher D indicated how experiencing the processes of AR enhanced and changed her awareness of her own teaching practices: "… never did I have to look at my teaching this way".

She also found it valuable in "questioning my teaching, which allows me to see the weaknesses and strengths in my class". In this way she reported, "I could improve my teaching".

Teacher H felt empowered professionally by the process of AR in that she now had a systematic way of approaching her teaching that gave her choice and a framework for adopting new strategies: "I like the cycles in AR. The stages of planning, action, monitoring, and reflection enabled me to evaluate and modify my teaching strategies: evaluate and modify again. I adopted this system to teach in other classes too."

Teacher B highlighted the "internal side" of AR, which she had not found in other kinds of professional development activities:

"I feel good with AR. In particular because everything was from my side: the problems were rooted in my classroom with which I was quite familiar, and the solutions which I proposed were something I could handle. Seminars and other training courses certainly gave me knowledge. However, it was not always applicable and suitable in my classroom context. In other words AR made me feel at home."

As a learning process about teaching, AR appeared to offer the teachers professional activities that were directly located in their own classroom and towards which they felt a sense of ownership. This contrasted with their previous experience of professional development, which had involved the transmission of expertise and top-down recommendations about how they should change their approaches to classroom practice. In addition, the teachers appreciated being "managers" of their own research, rather than those "researched upon", who chose the topics of most interest and importance to them, and conducted it in their own way in their own classrooms. Teacher J compared AR with other research conducted in his school, indicating that he gained more authority through AR:

"There have been many research studies conducted in my school. But usually we were the object of the study, that we had to do this and that and were evaluated by the researcher. AR is different. We were the boss who has the right to plan and to do the research, even to modify it if something unplanned happened in the research."

Teacher H liked the way that AR could be used as a research and professional development tool by teachers at any time and was therefore a flexible way of engaging in one's own professional growth:
"While teachers had to wait for their turns or rotation to be able to participate in other PD activities, we could do research at any time through AR."

In comparison with more traditional ways of conducting and experiencing professional development in Indonesia, AR appeared to be favoured amongst these teachers as an engaging way of renewing their interest in their chosen profession.

Teachers' Perceptions of Whether Their Involvement in AR Affected Their Classroom Practice

Teachers in the study, made numerous comments about the impact of AR on their teaching and also on how for them it had been a learning process. They noted that they had gained new ideas and strategies for teaching by sharing their research with other teachers. They had also noticed considerable changes in their own and their students' motivation and AR had regenerated their enthusiasm for teaching. For example, Teacher J reported that AR was initially difficult for him but:
"I became more honest to myself, which was very uncomfortable initially. But then I could look at the problems more clearly. And it was easier for me to think about strategies which might solve the problems."

Teacher E noted how AR had changed his attitude to teaching after a period of feeling jaded and seeing his students as passive and unresponsive: "I became more engaged with my teaching, more careful in preparing the lessons. And I became more diligent in correcting the students' work". Other teachers commented about how they had rethought ways of organising and managing teaching activities. Teacher A had been worried about noise problems she had in teaching speaking. She commented that: "Implementation of AR in my class has solved my problems: giving the students as much opportunity to practise speaking without disturbing other classes. I brought them to do that in the hall."

One of the main outcomes of the changes in practice noted by almost all the teachers was the noticeable difference in classroom dynamics and relationships. The teachers reported that changes in their own practice had produced changes in the students' motivation and learning. Teacher I reported that his students usually gained low marks on tests. Their achievement had increase significantly when he involved his students an "unthinkable-before strategy" –asking his students to write test items. His own confidence also increased after the second test. As he stated, because the students' results " increased more than 200%, not only me, the students looked happy too with this." As a result, his students' general motivation to learn increased:

"Their hard work paid off, since they got much higher marks in their tests. The students were more motivated and I could feel that they were proud of themselves".

Teacher I felt a deep sense of achievement and motivation as a teacher: "I am proud of myself since what I taught was understood by my students and the process of teaching and learning was more fun".

Similarly, Teacher B noticed an increase in student motivation: "What I learned from AR was that it helped me to help my students. My students, especially those who used to be quiet showed their enthusiasm in participating in my lesson. I could feel that their motivation was increasing, as they believed that they were capable."

Teacher J criticised himself for not being more flexible with his students. He reported to the group that he frequently got angry and "I was not patient with my students". To solve this problem he decided to deliberately implement what he called ëmotional management and to try out different activities that he had not used before, such as language games. He began to comment to the other teachers that in contrast to the previous atmosphere in his class, both he and his students became "happy and productive".

In various ways all the teachers reported that the AR strategies they used in their research had answered or solved the problems they had identified. Several reported significant improvements, such as increased attendance, much greater engagement of students in learning English and improved test achievement. In addition, AR had introduced them to strategies they had not previously thought about or dared to try. Given the support offered by the researcher and by the research group of teachers themselves, implementing change in their classrooms and observing the result had become much more feasible.

DIFFICULTIES THAT TEACHERS ENCOUNTERED AS THEY CARRIED OUT THEIR AR PROJECTS

As the discussion above suggests, there were many positive aspects of AR for the teachers. However, it would be naïve to assume that AR is an uncomplicated and straightforward process or that teachers can easily incorporate AR into their already demanding teaching loads. A number of authors (e.g., Burns, 1999; McKernan, 1996) have noted difficulties such as time management, limited resources and funds, work overload and a lack of confidence in conducting research, which were similarly reported by teachers in this study. Table 3 below outlines the nature of the main challenges that were encountered.

Table 3: Teacher difficulties in implementing AR

General Problems	Research Problems	Individual Problems
ˈ Managing time	ˈ formulating and focusing problems	ˈ lack of confidence to complete the AR
ˈ limited funds	ˈ recognising important aspects developed in the research	ˈ teaching facilities
work overload	planning, acting, monitoring, and reflecting	ˈ criticism from senior teachers
	ˈ planning next cycles in AR	ˈ criticism from colleagues
	diary writing	ˈ lack of energy
	ˈ writing research report	ˈ lack of motivation
		ˈ family commitment
		ˈ conflict with school priorities

One the major general difficulties for the teachers was the time commitment. Teacher C, a female teacher, who had a very tight teaching schedule noted that during her research "I hardly had time for my family", while Teacher J who had many other out-of-school commitments, added only half jokingly, "Eight days a week would probably be good".

Other teachers, like Teacher D, commented on their skills and knowledge in undertaking research, "I worried that what I do in my research is rubbish, which is based on my fantasy alone". Teacher F worried that other teachers would question her research abilities and added, "My topic is too simple for AR". Teacher G wanted to know "if this topic has academic

value". Some teachers found the processes of AR demanding. Teacher F realised that she had "too many goals in the first cycle", while Teacher C indicated that she felt pressured, and so she "often recorded mentally what I did in each stage of the cycle" and then "did not always remember the whole process". For Teacher J there were "too many steps to write" which led to difficulties in developing "plans for my next action strategy".

Some teachers encountered scepticism or criticism from colleagues as in the case of Teacher E who became discouraged when another teacher commented "…you are doing the impossible". Teacher E, however, managed to persist when he realised his class was improving. Teacher C found it difficult to engage in AR because of her very heavy workload and her constant tiredness and lack of energy. Although she never fully engaged in her research in the same way as some of the other teachers, her enthusiasm was kindled by a visit to the resource centre of the Language Centre where the researcher taught: "For a lethargic/burned-out teacher like me, the library is very helpful in providing varieties of easy-to-use materials."

The three sets of findings in the above discussion suggest that while AR can often be demanding for teachers, it does have significant personal and professional impacts on teacher growth. These impacts could be said to relate to three dimensions of change in the teachers' thinking:

- The dimension of *place*: that research and professional development can be located in teachers' everyday places, the classroom
- The dimension of *time*: that professional development is not time-bound and can be undertaken in combination with teaching
- The dimension of *approach*: that teachers can be the subjects of research and not the objects, the researcher rather than the researched-upon.

In order to illustrate in more detail the impact of the AR process on teacher development, we now present a case study of one of the teachers in the study, Teacher H. The extracts from the teacher are taken from her diary and from interviews with the researcher.
We select this teacher in order to show how AR can be used to change teaching and learning practices in challenging and difficult teaching situations.

CASE STUDY: TEACHER H

Teacher H taught in a school where students' achievements were generally low. Of the seven schools in the study based on the results of the 2002 national examinations, the school ranked last. In addition, students came from low socio-economic backgrounds, seemed generally very

unmotivated to learn English and there was a poor student attendance. According to Teacher H, the students showed a slow process of learning and there were problems of discipline and classroom management. There were five students in particular who troubled the teacher as they needed extra attention:

"They were all from broken-home families. It seemed to me that they came here only to sleep… If these students attend a lesson in the morning, we could not expect to see them in other lessons after that. "

Teacher H felt that for these students "the classroom was like a prison". The teacher was a dedicated and committed teacher and was very concerned about trying to address these problems. She was looking for ways to change the situation for the students. In her words: "…there are so many things I would like to solve and improve. But I feel powerless."

The teacher found out that the AR group was about to begin and she volunteered to join the group and to work with the other teachers. Her aim was to investigate new teaching strategies to help her overcome the problems of poor attendance, what she saw as laziness on the part of the students and their passive attitudes. She decided to talk openly in her classroom with her students about these challenges to her teaching. She also invited them to share their ideas about teaching and learning in her class. She stated in her diary:

"Negotiating the lessons with the students means involving them as members of a team. And this means giving them trust and responsibility as well."

The teacher then distributed questionnaires that she had prepared to the students, which asked them to state what kinds of activities they wanted to do in class. She discovered that they found the materials she was using to be unengaging; they wanted more variation in teaching materials and for the materials to be presented in a more interesting way. They also wanted to vary the location of the class. Having discussed the results of the questionnaire, the teacher and students agreed:

- that she would hold the class in different location (under the teak tree behind the classroom, in the library, in the hall);
- that the students would keep to class rules for getting to the location on time and not disturbing other classes;

- that the teacher would continue to choose the materials but vary her approach so that the students were not "being told" about the materials only.

The teacher was immediately encouraged at the students reactions to this discussion – some of them slowly began to voice their opinions and seeing her encouragement, others joined in. The students began to look more energised even though some of them kept silent. The teacher commented that the "good atmosphere in my class was inspiring".

In the next lesson, they worked in the shadow of the trees in groups. Students discussed vocabulary and answered questions about the topic they were discussing and then did written exercises based on their discussion. The teacher noticed that some students were excited and eager to discuss, but others were distracted by the new environment and did not participate very actively. In order to address this problem, in the following lesson the teacher reminded the students about the rules they had agreed and asked them to think about these rules when they met in their next location of the library.

The following lesson, when she arrived at the library all the students were already there, waiting for the lesson. She had decided to vary the material and activity by teaching the students a song. They worked in groups to read the words of the song and then to listen to the song on a cassette and identify some missing words. The students and the teacher finished the lesson by singing the song using all the completed lyrics. The teacher observed that the students seemed to keep their own rules much more than on the previous occasion and the students who had been inattentive in the last lesson were much more involved. Also all the students attended the class, even the five students who were frequently absent, who had heard that something new was happening in Teacher H's lesson. She found the atmosphere in the class and the dynamics amongst the students to be increasingly positive and cooperative as she continued to introduce these new strategies into her lessons. Teacher H came to several conclusions about her research:

> *"Negotiating the teaching-learning process with the students improved the unfavourable class situation...Since the negotiation provided me with data of student preferences, it helped me to become more relaxed and foused to prepare teaching. I could also expand my roles as a teacher. Now I could also place myself as a friend in teaching: not only as the one who always orders and instructs. Positioning the students as "humans" and not as "objects" made my work lighter and easier."*

CONCLUSION

In general, the ten teachers who took part in this study developed positive attitudes towards AR as a form of professional development. Their previous experiences of professional development in Indonesia had led them to see it as a very formal training experience of attending seminars or talks. Professional development was seen as an "external" and not as an "internal" process. At the beginning of the project there was no suggestion from the participants that the classroom was a place for developing and learning as teachers. The teacher's role in professional development and, indeed, in research was seen as a passive rather than an active one. More broadly, the research suggests a number of implications for AR in Indonesia, not all of which we have specifically analysed in this article. They include the following:

- while centrally organised teacher professional development can be valuable, teachers also greatly appreciate the opportunity to try out and experiment with new ideas in their own classrooms;
- schools have an important role to play in encouraging their teachers to see effective professional development as something that can be done internally;
- support from the school, and if available, from a facilitator is invaluable when teachers are conducting AR in their classrooms;
- there are potential benefits for schools that provide opportunities for teachers to share their teaching issues and to investigate them collaboratively;
- teachers value the opportunity to present their research and get feedback from their peers and others;
- there are benefits to be gained for teacher education faculty who undertake AR in collaborations with teachers as these provide insights into how teachers deal with classroom problems and how they learn from these experiences.

AR is very new in Indonesia and there are few studies published in the literature that show how it can be used in professional development.

Our aim in this article has been to begin to illustrate, in the Indonesian context, some ways in which teacher groups can work together, to formulate research questions and to undertake AR over a period of time. It is our hope that the illustrations we have provided will be valuable to teacher educators and teachers who wish to adopt a similar approach.

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