Chapter Four

Teachers' Professional Development and Action Research

This chapter describes the findings of the AR study. As mentioned in section 3.4.4, the data collection mainly involved ten high school English teachers and was conducted through the pre-workshops, the AR workshops, the implementation of AR, the AR poster presentation and seminar, and the follow-up back-to-school study. The findings are organised into three major stages: the inputs of teachers' AR that focused on the pre-workshops; the processes of teachers' AR that investigated the AR workshops, and the teachers' implementation of AR in their practice; and the products of teachers' AR that focused on the poster presentation and seminar, and the back-to-school evaluation. Prior to the description of the findings is an explanatory framework which aims to describe how the main concepts and processes in the study interact.

4.1. Explanatory framework

In this study, teachers' AR is conceptualised in an overall research framework of the *inputs*, the *processes*, and the *products* which aims to show the interaction and the flow of the study. The stage, *inputs of teachers' AR*, reflects the initial part of the framework of the research. This stage forms part of information collection as the background to the research. This stage depicts the teachers' situation at the beginning of the AR study before they participated in AR workshops. It investigates the teachers' responses, perceptions, and ideas about

PD. This stage also gathers information about teachers' prior knowledge of AR. The data were collected through questionnaires, which were followed by indepth interviews.

The findings obtained from the *inputs of teachers' AR* stage emerged as an important basis for the second stage, *processes of teachers' AR*. In this stage, teachers were invited to participate in the AR workshops which offered them knowledge of the nature of AR and research skills to conduct AR. From this point, the teachers then conducted AR in the classroom. The AR workshops and the implementation of AR are identified as *processes of teachers' AR* because they are part of a different type of data collection from the previous stage. This stage was more complex as it engaged a wider set of data collection techniques such as interviews, diary writing, observations, and reflective notes. The complexity is also reflected in the process of analysing data. Unlike data collected in the *inputs* which form a database for the research background, the *processes* deal with tracking, understanding, and interpreting what was actually going on when teachers participated in AR workshops and conducted AR. This stage also analyses what factors impact on the teachers and their responses to conducting AR.

The products of teachers' AR stage refers to the dissemination of the teachers' AR and the evaluation processes following the research. This stage aims to investigate the results of the teachers' AR and the impact of AR, particularly on how it changed their teaching. The dissemination of the AR outcomes to other

teachers was conducted through a poster presentation and a seminar. The impacts of the study on the teachers were investigated through a back-to-school study in which teachers answered questionnaires and were interviewed.

The interaction and the flow of those stages above are presented in Figure 4.1. as follows.

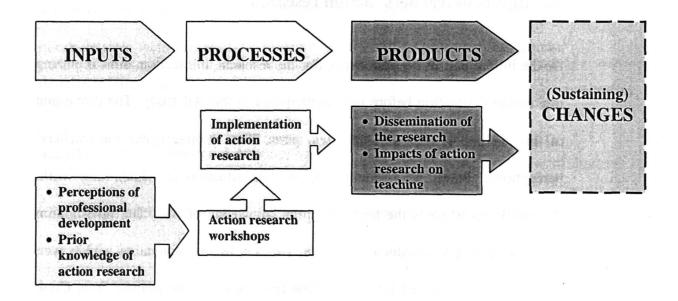


Figure 4.1. Framework of the Action Research Study

It is widely believed that *change* and *learning* are the outcomes for teachers who take part in AR (Dick, 1993; Macpherson, Arcodia, Gorman, Shepherd, & Trost, 1998). The teachers who participated in this study underwent dynamic processes of learning and conducting AR. To some extent and in various levels this study brought *changes* to them personally. However, this study focuses its discussions on the inputs to, the processes during, and the products of the teachers' AR. Sustaining changes for teachers who had conducted AR is beyond the discussion

in this study. Nevertheless, some implications of the research in relation to this issue and suggestions for sustaining changes will be presented in Chapter Six.

In the following sections, each of the stages, the inputs of teachers' AR, the processes of teachers' AR, and the products of teachers' AR are discussed.

4.2. Inputs to teachers' action research

As the initial part of the framework for the research, this section aims to portray the teachers' situation before they participated in this AR study. The discussion of this section is presented into two parts. First, it investigates the teachers' perceptions, views, ideas about PD, and the situation in which they work. Second, it investigates the teachers' prior knowledge of AR. The investigation for both parts was conducted through two sets of questionnaires which were followed by open-ended interviews. The first questionnaire adapted from Cook (1991: 1) (see Appendix 3.1), focused on investigating the teachers' perceptions of PD. The second questionnaire (see Appendix 3.2) focused on collecting data about the teachers' AR knowledge prior to this study. The findings from this stage provided a database about the teachers' PD experiences and research background which could be used as the basis to prepare the second stage, especially the AR workshops. The discussion of the teachers' perceptions of PD and the teachers' prior knowledge of AR is presented in the following sections 4.2.1 and 4.2.2.

4.2.1. Teachers' perceptions of professional development

This section consists of seven parts and summarises how teachers perceived PD.

The discussion is descriptive in nature and addresses topics raised by the teachers' responses. To support the description, comments from the participants are included. The data were obtained from a set of questionnaires (see Appendix 4.1) which were distributed to the teachers at the beginning of the study. The questionnaires were followed by in-depth interviews, in order to obtain more detailed information.

4.2.1.1. What is professional development?

There were three categories of teacher's perceptions of PD as illustrated in Figure 4.2.

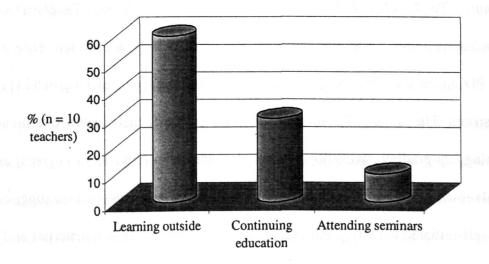


Figure 4.2 Teachers' Perception of Professional Development

Figure 4.2 shows that six teachers interpreted PD in a broad sense as any activities excluding teaching that make teachers learn. In this category is Teacher A who said, "When the principal asked me to come to a training session and learn something, that's what I called PD". Likewise, Teacher J defined PD as, "... as long as it is conducted outside classes and there was something that I learnt"; and Teacher E who stated that PD was, "Any activities recommended by the principal which make teachers think".

The second type of perception, represented by three teachers, defined PD more specifically. These teachers related PD to formal education in which PD was a way of improving teachers professionally through continuing education. For example, Teacher B said that PD, "... is finishing my post-graduate study".

Figure 4.2 also illustrates that only one teacher defined PD in relation to its format. To Teacher F PD was perceived, for example as, "Teachers who attended seminars". Although teachers responded variedly, a common sense was that PD meant teachers doing and learning something about teaching outside the classroom. The range of PD formats identified by the teachers included seminars, training, up-grading, workshops, continuing education (courses or degrees) and involvement in research with university staff. Interviews with teachers suggested that self-initiated activity, such as reading books to enrich lesson materials and to improve teaching techniques was not classified as PD. This was reflected in Teacher D's argument, " ... but that was my initiative, not appointed by the principal"; while Teacher A said, "To me, PD is more sophisticated than just reading books".

The availability of PD programs to the teachers varied considerably from monthly, biannually, annually, to incidentally. Excluding formal study such as taking a postgraduate degree, PD activities took from a half-day to four weeks. PD programs were spread into local, regional or provincial, and national level. At the local level, PD activities were usually conducted by the MGMP or local institutions. The participants in the local level PD were high school teachers within the district area. The higher levels of PD were conducted by higher institutions in the regional or national levels and were attended by participants from wider areas, such as teachers from within the province of Central Java or from nation-wide of Indonesia.

4.2.1.2. Who decides teachers' participation in professional development?

All teachers responded similarly when answering the question "Who decides whether someone is to participate in professional development?" as they indicated that they had never intentionally asked to attend seminars or other kinds of PD. Table 4.1 shows that teachers were selected by the principal or the vice-principal who was in charge of curriculum affairs to take PD activities. When interviewed and asked, "What is the decision based on?" a principal revealed that in choosing teachers to participate in PD activities, he considered, "... the availability of the PD programs, rotations among teachers, teacher allotment from the PD project management to each school, and the availability of funding" (Principal A). He clarified that,

The school supported teachers who conducted PD by appointing substitute teachers. However, the school could not always provide

financial support to send teachers for training or to attend seminars. (Principal A)

This PD activity very much depends on the budget and funding. As presented in Table 4.1, PD was usually funded by the government, universities, or the organisations and institutions that conducted PD.

Table 4.1: Decisions for Teachers to Participate in Professional Development

Decided by	Based on	Funded by
 principal vice-principal	 project availability teachers' rotation allotment funding national policy 	governmentuniversitiesorganisations or institutions

When selected to participate in PD courses or training, eight teachers responded readily although two of them indicated that they preferred to avoid it. Of these two, *Teacher C* stated that although she was willing to participate in a PD program and was aware of its benefits, she preferred to give the opportunity to younger teachers. As she was about to retire, *Teacher C* believed there was no point in upgrading herself, "*I have been tired of teaching*". The other teacher, *Teacher E* was reluctant to take part in PD activities because of family commitments which meant he had to take care of a sick family member.

Another aspect of taking part in PD was that under certain circumstances teachers felt obligated to participate. For example, *Teacher F* indicated that she did not really need to continue the undergraduate studies she had already completed because, "I have been confident with the way I taught".

However, $Teacher\ F$ had to make an extra effort to continue undergraduate studies because of the implementation of a national policy, which recommended that all high school teachers should hold undergraduate degrees. Otherwise, as $Teacher\ F$ reported, she would not have considered taking her undergraduate degree.

When the teachers were interviewed about how they projected their future PD plans, the responses indicated four types of plans to undertake PD programs. One teacher reported that she did not have any plans to participate in PD activities. This was Teacher C who stated, "I am about to retire and I think I am too old to learn". Two teachers indicated that they were not really interested in undertaking PD, but they would participate in PD programs if the principal asked them to. These two teachers suggested that they already felt confident with the way they taught. Four teachers said they would participate positively in PD activities which did not take too much time, such as in a one-day training course or seminar. Teacher G, for example, said, "As long as it is not more that one day, it will be all right. Otherwise, I have to think about it". Three other teachers planned to take further education to gain their postgraduate degrees, such as Teacher A, who stated, "May be after my husband finishes his study, then it will be my turn to take my postgraduate studies".

4.2.1.3. Who decides the content of professional development?

All teachers had participated in local PD activities which were conducted by the English MGMP. Seven of them had attended regional PD activities which were

usually undertaken with other high school teachers in the province of Central Java. Table 4.2 shows the content of courses and activities in PD programs identified at the provincial level.

Table 4.2: Contents of Professional Development Programs

Items teaching methodology curriculum & material development language laboratory skill speaking reading writing listening vocabulary structures Decided by project committees English MGMP experts from universities

Occasionally, there were training sessions or seminars to introduce, to socialise, and to assist teachers in implementing new curriculum approaches. At the local level, the contents of PD programs which were conducted by the English MGMP were basically the same as those conducted at the provincial level. However, there were complaints from teachers about the quality of PD conducted by the MGMP. The teachers indicated that they were bored with the monotonous activities such as writing test items and lesson plans. Eight teachers claimed that it wasted time. Teacher I, for example stated, "MGMP deals with more administrative than professional activities". On the other hand, the Chairman of the English MGMP argued that MGMP suffered from a lack of funds. The English MGMP could not afford to conduct seminars given by expert speakers from universities or other institutions. This suggests that the quality of the contents of PD programs is lower at the local level than the provincial level.

Teachers had little involvement in deciding the content of PD. Six teachers indicated that the content was planned by PD project committees. Two other teachers assumed that beside the project committees, the English MGMP was involved in designing the content of PD. The other two teachers did not know who planned the content. When interviewed, the Chairman of the English MGMP reported that there were at least three groups involved: the project committees, experts from universities, and the English MGMP. He mentioned that teachers had indirect involvement in this matter through informal feedback or input collected at the English MGMP meetings. However, teachers who belonged to the English MGMP committees or teacher instructors had more direct contribution to PD activities, programs, and teaching strategies.

4.2.1.4. Professional development and student achievement

When asked how they related PD to student achievement, the teachers indicated that the implementation of new knowledge in their classes held an important role in improving their students' achievement. However, six teachers reported they did not implement changes. Of these six, three teachers thought there was a lack of urgency in applying their knowledge obtained from their PD. Two teachers found it inconvenient to apply what they had learnt in PD to their teaching because they were already confident with the way they taught. Another teacher did not implement the new knowledge because there was no monitoring, as stated by *Teacher I*, "*After all nobody monitored me, and nobody evaluated the programs*".

On the other hand, four teachers were positive about implementing knowledge from the training or other PD programs in their teaching. However, they found it difficult to carry out, especially because of time constraints, workload, and lack of teaching materials. Moreover, the impact of the implementation needed time to evaluate, and teachers indicated that they faced a burden' as a consequence of the implementation. According to $Teacher\ F$ the implementation of the new knowledge was risky. She reported that while the implementation did not guarantee improvement in her class, she had to sacrifice her time in conducting the implementation.

On the one hand, I am not sure whether it is successful. On the other hand, if I implement knowledge from the seminar it means another burden. Because while I have to teach my class based on the official curriculum, I have to spare my time and my attention for this implementation. (Teacher F)

As another example, Teacher D complained that implementing new ideas took more time for preparation and corrections. Teacher D worried it might, "... distract my attention from the main focus: teaching lessons as guided in the curriculum". Teacher D indicated that she also needed more funds to copy the materials. Not every school in Indonesia has a photocopy machine to help teachers prepare for their teaching. Even if they have, sometimes the procedures are so complicated that teachers are discouraged from using it.

4.2.1.5. The impact of positive professional development experiences

When asked to report on positive PD experiences, only three of the teachers reported positively. The other seven teachers described their experiences as

unimpressive. Of the three teachers, *Teacher C*, for example, recounted her PD experience from a long time before when she was a beginning teacher. She was supervised by a senior teacher in organising a conversation club. *Teacher C* described her supervisor as a very knowledgeable teacher who supervised her well. During her PD, she gained experience in developing material, improving her teaching techniques, working in a team, and developing her speaking comprehension. *Teacher C* commented, "I was keen to make notes and collected the materials in the conversation club. I found it very useful to use in my classrooms. The materials were interesting and applicable". This experience was obviously positive for her as she suggested that every beginning teacher would benefit from receiving assistance and support in the same way as she had.

Teacher E, as another example, had recently attended a one-week training course. The training, in which high school teachers in the province of Central Java upgraded their language skills and teaching methodology, was a provincial level PD program. The training itself was reported as not really impressive.

Teacher E said, "Basically there was not something new". As part of the training, they visited a high school that had developed a successful language program. In this school Teacher E said that he had an opportunity to,

...share ideas with teachers and students in this school. The teachers had lots of fresh ideas to improve and provide chances for the students to use English, and the students were confident with their English. In this school I also saw the students conducted role-plays in order to practice English. (Teacher E)

Teacher E indicated that he was impressed by this school visit which provided experience of a "different atmosphere" (Teacher E) of teaching and learning. He

noted some ideas and activities that he hoped could be adapted and applied in his classes.

Similarly, *Teacher H* reported an encouraging PD experience. It had occurred when she had an opportunity to work in a research team with university lecturers when she initially taught in her school. The research was an AR project which focused on supervising beginning teachers. During this experience she indicated she learnt a lot, "*It made me think of my teaching carefully*". Furthermore, because the research focused on supervising new teachers, she benefited not only from gaining skills in research methodology, "... happy that I gain knowledge and skills of AR", but also from improving her teaching techniques and building her capacity to be an effective teacher.

I think I had better ideas in preparing my lessons, presenting them to my students, and evaluating lessons. This helped me to carry out the lesson in a more varied way so that the class was more interesting. These are really beneficial supports for me, more than I expected, considering I was a new teacher. (Teacher H)

Teacher H indicated that her involvement in the research was so inspiring that she was very enthusiastic about the opportunity to participate in another AR project. As in her previous research, she wanted to learn more and gain benefits from her participation in this study.

Although *Teacher C*, *Teacher E*, and *Teacher H* had different PD experiences, there were similar aspects of PD which impressed them. Each of them reported similarly that the knowledge they gained from their PD activities was practical and applicable for their teaching context. In addition, the delivery mode in the

PD programs they attended was not an information-oriented approach such as lecturing.

Teacher C was engaged in a conversation club; Teacher H was involved in AR collaboratively with university lecturers; and although Teacher E attended a training program which adopted lecturing in transferring knowledge to teachers, it was the school visit which interested him. School visit is believed to effective for teachers who consider to adopt an approach and to observe its implementation in reality. School visit also offers teachers with opportunity to, "have time to ask questions and discuss what they have observed with their hosts" (Northwest Regional Educational Laboratory, 1998).

4.2.1.6. Difficulties in participation and suggestions for professional development improvement

All teachers reported that they had difficulties in participating in PD activities. Table 4.3 summarises the findings from the questionnaires and interviews and shows that the constraints for teachers in undertaking PD activities originated from managing time, limited funds, lack of confidence in their ability to study, other job commitments, family commitments (e.g. caring for a sick mother), and family priorities (e.g. teachers whose children were attending or were going to attend university prioritised their children's education).

Table 4.3: Teachers' Difficulties in Participation and Suggestions for Professional Development Improvement

Difficulties in PD	Teachers' Suggestions for PD Improvement	
Participation		
• time	 more opportunities 	
funding	 conducive atmosphere 	
 lack of confidence 	 acknowledgement/appreciation 	
 family commitments 	 optimising any resources 	
 family priorities 	 monitoring for teachers who had just finished participating in PD 	
 discouraging comments 	 greater MGMP creativity 	
0 0	 more MGMP collaboration with institutions 	

Teachers indicated that among these lists, a lack of time was the biggest constraint that hindered them from PD participation. All teachers indicated that this was because they had too great a workload in their schools. My journal revealed,

It is very common in Indonesia for teachers to have large classes, extended teaching hours, lots of materials to teach, and other administrative duties which sometimes do not relate to teaching as the main duty. This leaves teachers with not much time to reflect on their teaching. (Researcher's journal)

In addition, discouraging comments from colleagues could sometimes hinder teachers from participating in PD programs. For example, this occurred when *Teacher C* attended a seminar in a city nearby. When *Teacher C* wanted to buy English books in the exhibition, she reported that one of her colleagues said, "... it's wasting money ...there are other things worth buying than books". She withdrew her intention, although when she was back home she bought the books in a local bookstore.

In addition to the difficulties, Table 4.3 also lists teachers' suggestions about improving PD in their schools. They recommended that the schools provide more

opportunities for teachers to participate in PD courses. They indicated that while teacher rotations were appropriate, the principals should also consider which teacher needed PD most, and the continuity of the program. *Teacher J*, for example, complained about the rotation system in deciding teachers' participation in PD.

The rotation system should be reviewed. I missed the second part of a language skill workshop, as it was not my turn. Unfortunately, the teacher who attended the second part of that language skill workshop could not gain optimal benefit either, since he missed the first part. (Teacher J)

Other suggestions from teachers focused on the atmosphere in their schools which they felt should be able to "promote creativity" (Teacher J) and provide support for teachers for participation in PD. Teacher E specified the support he desired from the school, such as, "an assistant for correcting, and reducing the teaching hours". Acknowledgement by the schools, as mentioned by Teacher B was significant and made teachers feel more appreciated. Teacher B said, "I don't fancy the impossible, simple things such as acknowledging what we did in PD courses is good enough for the appreciation".

Teacher J suggested the optimising of resources in the school for PD activities. For example, as mentioned by Teacher J, "Inviting teachers to design and organise PD would make a difference". This, as Teacher J stressed, "... would reduce the school's financial dependence on government funding and the availability of PD projects". At the same time, by optimising and involving any available school resources, Teacher J said that the schools could "... independently make provision for PD activities".

Teacher G suggested that the school should be able to create a conducive atmosphere which encouraged teachers to initiate and participate in PD activities. For example, Teacher G mentioned that a "simple activity", such as "...group discussion between or among teachers of the same subjects, would be positive because teachers could obtain professional benefits from this activity".

Teacher D offered a suggestion that the school conduct monitoring or evaluation for teachers who had just finished participating in PD activities. Teacher D suggested teachers should be encouraged to "... share the up-graded knowledge gained from participating in training or in a seminar with other teachers in the school". Teacher D explained that, "This could be done in an informal sharing of ideas among teachers of the same subject or other teachers who were interested in the topics". She believed that this would require teachers to focus their attention during the training because of the awareness that they would have to share knowledge with other colleagues. "If I know that I have to explain the knowledge from a seminar to other teachers, I will be very keen, make notes, and pay full attention to the seminar", commented Teacher D.

Teachers also offered suggestions to the English MGMP. Three teachers commented that the English MGMP should be more creative in organising PD programs. It was also suggested that the English MGMP should establish collaboration with other institutions such as universities to avoid monotonous repetition of their PD activities.

The section above discusses the first part of the initial stage of the overall framework, the inputs of teachers' AR, which focuses on the teachers' perception of PD. From the discussion, it can be seen that teachers typically perceived PD as activities of learning conducted outside the classroom in the forms of training courses or seminars. They also perceived that the teachers' participation in PD only became important when it came from the higher authorities and was regulated as a national policy.

In addition, teachers indicated that knowledge obtained from PD participation could not always be implemented in teaching. They perceived difficulties in PD participation and made suggestions to improve the situation. The data obtained to this point were used to provide background information for the AR study design, especially for conducting AR workshops.

In the following section, the second part of the inputs of teachers' AR, which provides further background information concerning teachers' prior knowledge of AR, is presented.

4.2.2. Teachers' knowledge and involvement in action research prior to the action research study

This section focuses on the teachers' knowledge of AR before they participated in this study. The discussion in this section is generated from analysing the results of questionnaires (see Appendix 4.2) and in-depth interviews with the teachers. As illustrated in Figure 4.3, teachers' responses fell into three groups relating to their knowledge of AR prior to this study.

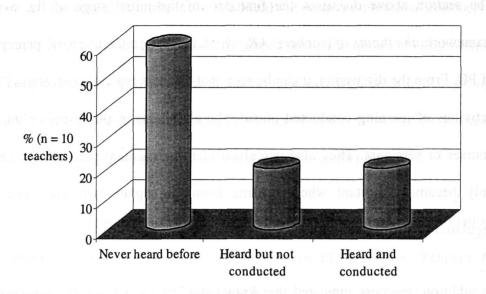


Figure 4.3 Teachers' Prior Knowledge about Action Research

Six teachers had never heard about AR; two teachers had heard about AR but had never conducted it; and two teachers had heard about AR and conducted it previously. Teacher F and Teacher G had both heard about AR from a seminar they had attended, but had not conducted any research. When interviewed about their experiences, Teacher F indicated that one seminar was not enough to grasp the nature of AR, let alone to equip teachers with sufficient skills to implement it. What Teacher F learnt from the seminar was too global, "... I do not have clear ideas about what AR is", and it was not specific to her teaching context, "... so in what way does AR help me?" Therefore, when asked about her suggestions, Teacher F recommended that there should be follow-up seminars which included more detailed accounts of AR and examples specific to teaching situations. Teacher F suggested, "To enable teachers to do AR, I think we need more other seminars especially which focus on the steps and procedures of conducting AR". Teacher G who experienced the same problem as Teacher F

suggested that introducing AR to teachers would be better through workshops than seminars. According to Teacher G, "Workshops would be beneficial and effective for teachers", particularly because they were more "intensive and able to provide step-by-step guides" (Teacher G) about the implementation of AR.

Figure 4.3 illustrates that there were two teachers who had heard of and also conducted AR before participating in this study. One of them, Teacher I recounted his experience with AR in a team of four teachers. This team was supervised by a senior teacher from his school. However, not long after Teacher I began to conduct AR in this study, he indicated that he was questioning his previous AR experience. Teacher I noted that what was missing from his previous AR were the cycles and the stages of planning, action, observation, and reflection which were essential in "real" AR, "There were no cycles in my previous research". So, Teacher I concluded that the previous research, which he had believed to be AR, was actually applied research (Cohen, Manion, & Morrison, 2000). When asked about the supervisor's role during his previous research, he reported that his supervisor was not more knowledgeable than he and his team members about understanding the nature of AR and how to implement it. Teacher I commented about his supervisor, "I remembered there was no correction about the approach of the research, so that we did not know that it was actually not AR".

The other teacher who had heard of and conducted AR was *Teacher H*. As previously mentioned, she participated in an AR project which focused on supervising new teachers. This project was conducted with three university

lecturers. Since Teacher H was a new teacher herself, she became the participant who was supervised in the study. Teacher H was asked to carry out strategies that she was told about when she was supervised. Teacher H reported that her involvement in the research was positive, "I was blessed and fortunate to be recruited in the (AR) research. It gave me perspectives on how to teach appropriately". In particular, Teacher H noted that discussions during the research enabled her to share ideas and receive assistance from other researchers. In the discussions, which were conducted right after her teaching, not only did Teacher H receive feedback on her teaching, she also benefited from talking about the preparation, interpretation and evaluation of her lessons. This opportunity, which she claimed was not easy to obtain, was available continuously during the research project period. Teacher H reported that during the study she could even telephone the researchers at their homes if she really needed help. Teacher H indicated that she had benefited from the AR project in developing her teaching techniques, managing classes, choosing and developing materials, and building her capacity to be an effective teacher. The benefits of AR were, as *Teacher H* reported, especially important for her initial career when she needed assistance most. Teacher H indicated that her involvement in the research was an important milestone which inspired her teaching afterwards as, "It made me think and prepare my teaching carefully". Because of her positive PD experience, Teacher H reported that she was very enthusiastic to participate in this AR study, as she wanted to learn and to gain more benefits.

The discussion above indicates that most teachers were not familiar with AR. Only some of them had heard about it and conducted research. It also revealed that regarding the way of introducing AR, it was suggested that workshops provided teachers with better comprehension than seminars.

This section ends the presentation of the whole initial part of the research framework, inputs of teachers' AR. The discussions, as presented in section 4.2.1 and 4.2.2, highlight teachers' perceptions about PD and teachers' knowledge of AR prior to this study. The findings of teachers' perceptions about PD and teachers' knowledge of AR prior to this study emerged as important input to the next stage of the research, the process of teachers' AR. In particular they provided background information for running, modifying, and evaluating AR workshops in this study. The findings revealed that there was a gap between the teachers' expectations and the researcher's expectations in understanding AR. This was so important information that enabled the researcher to select suitable strategies to explain the nature of AR and the process of AR to the teachers; and to select materials for the workshops which provided teachers with more explicit assistance in developing and choosing worthwhile and feasible topics for their research. The findings about teachers' perception of PD also provided significant insights on the changes in perceptions of PD that would need to be informed to the teachers. This would be an important aspect for the teachers in this study: to change their perceptions from a very traditional model of PD to a new transformative model.

The following section presents the next part of the framework, the process of teachers' AR, which focuses on the AR workshops and the implementation of AR.

4.3. Process of teachers' action research

The previous section traced the initial part of the overall research framework which consists of the input, the process, and the product of teachers' AR. This section focuses on the second part of the research framework, the process of teachers' AR. It presents the activities conducted by the teachers when participating in the AR workshops and the implementation of AR in the classrooms. This stage differs from the previous, the inputs of teachers' AR, in that it analyses realities that occurred when teachers prepared for and conducted AR. It attempts to track, understand, and interpret what the teachers conducted when undertaking AR, and what factors impacted their research. This stage engaged a broader range of techniques to collect data than the first stage, including interviews, observations, focus group discussion, diaries, and reflective notes.

The discussion is presented in two sections, the AR workshops and the implementation of AR. The workshops were conducted for four weeks towards the end of the second term. After one week of school breaks, they were continued with the implementation of AR by the teachers. The teachers conducted AR in the third term which took 14 weeks. The discussions of the AR workshops and the implementation of AR are presented in section 4.3.1. and 4.3.2.

4.3.1. Action research workshops

A series AR workshops was offered to the teachers before the implementation of AR. The workshops were conducted in HS 6 Surakarta and were designed to assist teachers to gain knowledge on the nature of AR and to develop skills in research methodology, especially AR. At the same time, another important objective was to develop a strong commitment on the part of the teachers to conduct AR on their teaching practices.

It was agreed that the workshops were conducted on four successive Tuesdays, the English teacher MGMP day, when officially they did not teach at schools. At the end of the workshops teachers produced "brief" AR proposals. These proposals provided guidelines for the teachers when they implemented AR. During all the AR workshops, data were collected by conducting observations and audiotaping the discussions. Data were also taken from the teachers' diaries, and the reflective notes collected by the researcher.

The discussion in this section focuses on three main topics: the adjustment of the schedule; the processes of conducting AR; and teachers' responses to the workshops. Each topic is presented in the following sections 4.3.1.1; 4.3.1.2; and 4.3.1.3.

4.3.1.1. Adjustment of the action research workshops' schedules

The AR workshops were held collaboratively with the English MGMP. Teachers from the English MGMP committees helped me in running these workshops, especially in organising administrative matters. This was recorded in my journal, "The committee members of the English MGMP showed their commitment. I am much helped by them in running the workshops" (Researcher's journal). I also collaborated with a colleague from my university, Colleague K. The choice of Colleague K was based on the consideration that, "He was familiar with AR as he had conducted AR several times before. We also had worked together in similar research situations and had previously presented workshops together" (Researcher's journal). In this study, Colleague K assisted me by providing professional advice and evaluating how the workshops and the study were progressing.

The four workshops were conducted towards the end of the second term. Initially, the workshops were designed for eight meetings, twice a week for four weeks. However, the timetables of the workshops had to be changed because the schools' agendas were very tight because of preparing the end-of-term examination. Eight of the teachers who participated in this study had committee responsibilities in their schools, so they were only able to provide one spare day each week for the workshops. "This meant that the plans, materials and activities for the workshops had to be adjusted accordingly" (Researcher's journal). To compensate, each workshop was followed by activities to be completed by the teachers (see Table 4.4 on the following section). These

activities aimed to elaborate the previous workshop. While completing the activities, the teachers' responses were monitored through interviews.

The previous data showed that some teachers complained about a lack of time and heavy workloads. I am a bit pessimistic about the follow-up activities, worrying about their abilities to complete the follow-up activities. But I do not see better choices. (Researcher's journal)

At the end of the workshops, each teacher completed a research proposal. Proposal writing was introduced to the teachers in the fourth workshop. However, the process of building the proposals had been developed since the second workshop when the teachers were introduced to identifying and focusing the research problems. The proposal (see the example in Appendix 4.1) consisted of the research topic, the identification of the problems, and plans to overcome them. Although it did not contain specific and detailed steps in conducting the research, it was expected that the proposal provided the teachers with a focus for the research and could be able to be used as a guideline in the implementation of AR.

4.3.1.2. Proceedings of the action research workshops

As mentioned, teachers were invited to attend four workshops, followed by the completion of activities in each case. Table 4.4 shows that teachers' follow-up activities were conducted for one week between workshops. The activities were then reviewed and discussed in the next workshop. In completing these activities teachers were encouraged to work collaboratively with their colleagues and to have discussion with the two facilitators, *Colleague K* and the researcher. The

discussions with the facilitators were conducted individually in order to assist each teacher with his or her unique situation. Table 4.4 summarises the timeframe and the programs of the AR workshops.

Table 4.4: Timeframe and Programs of Action Research Workshops

Time	Structure/	Programs
frame	Focus	
1 day	Workshop 1	 To introduce teachers to current trends of PD.
19 Feb 02	• PD	 To introduce teachers to AR.
	AR	 To assist teachers to discuss their understanding on AR and PD in
		their schools.
1 week	Follow up	 To reflect on PD and AR.
	activities by	 To have further discussion with colleagues and facilitators.
	teachers	
1 day 26 Feb 02	Workshop 2	 To assist teachers to review and to discuss their insights on PD and
	 Research 	AR.
	problems	 To assist teachers to identify research areas.
	 Literature 	 To sensitise teachers to the issues, problems, and questions which
	Review	might be amenable to AR.
		 To help teachers choose and focus the research problems.
		 To introduce to teachers to review the literature.
		 To train teachers to identify resources which could be used for their
		reference and how to access them.
1 week	Follow up	 To reflect on their own teaching.
	activities by	 To investigate areas of research interest, and propose five topics of
	teachers	research.
	<u> </u>	To identify references to support their research.
1 day	Workshop 3	 To assist teachers to review and to discuss their research topics.
5 March 02	Collecting &	 To introduce teachers to skills of research.
	analysing data	To introduce teachers to diary writing.
1 week	Follow up	 To write a reflection on their teaching.
	activities by	 To write a diary of the whole week's teaching.
	teachers	
1 day	Workshop 4	 To assist teachers to review and to discuss their reflections and diary
12 March 02	 AR proposal 	writing.
	 AR report 	 To introduce teachers to writing an AR proposal.
		To introduce teachers to reporting research.
I week	Follow up	 To examine samples of AR reports conducted by other teachers.
	activities by	 To write an AR proposal and discuss their progress with the
	teachers	facilitators.
		 To attend the whole group discussion in order to review and discuss
		their research proposal.
1 week	School break	To assist teachers to complete research proposals.
25 March 200	2, the third school t	term commenced and teachers started implementing AR in their classes.

In the following discussion, each workshop is described in more detail. The atmosphere of the first workshop was rather formal. It was opened officially by the Chairman of the English MGMP who was also the principal of HS 6. It was

attended not only by the English teachers who participated in the study and the two facilitators, but also by all committee members of the English MGMP, eight English teachers representing eight HSs, and the Chairman of the English Department of Sebelas Maret University where I worked. In the first workshop, Colleague K and I made presentations on current trends in teachers' PD and teachers' AR. Basically, the first workshop was designed to introduce teachers to the concept of PD and AR. The data dealing with teachers' perceptions of PD and their prior knowledge of AR which were collected previously emerged as important information to inform the presentation of this first workshop. In particular, the facilitators introduced teachers to varied ways of undertaking PD activities.

The aim was to broaden teachers' horizons and show that PD activities were not limited to seminars or training courses only; that undertaking PD activities could be started from the teachers' individual initiation; and that classrooms and teaching could be used as places to conduct PD activities. For the latter, I took AR as an example with which PD could be conducted simultaneously knitted together with teaching. In addition, based on the input from the previous data about teachers' prior knowledge of AR, the presentation on AR in this workshop was designed to be applicable for the teachers' teaching situation. Secondly, the first workshop was also meant to provide teachers with an orientation to the research plans. In particular, the timeline for conducting the AR workshops, proposal writing for the implementation of AR, and facilitators' availability to assist the teachers were discussed.

As shown in Table 4.4, after the first workshop, teachers were asked to complete follow-up activities by reflecting on the first workshop. The teachers were asked to reread the notes of the workshop and were encouraged to have discussions with their colleagues and the facilitators. During this follow-up week, I interviewed the teachers to investigate their perceptions of the first workshop. All of them indicated various levels of difficulties to understand the nature of PD and AR. Apart from being new to the ideas presented about the nature of PD and AR, almost half of them were not able to spare time to reread and conduct reflection on the workshop notes.

Two teachers said that they don't expect to read at home. Two other teachers who read the notes said that it was hard to comprehend to the nature of AR from reading the materials. The other six teachers complained that they did not have time to read. (Researcher's journal)

In addition, there was no indication that they initiated discussion about PD and AR with their colleagues or with the facilitators. When I interviewed them about this, Teacher F for example laughingly said, "What do you think would happen in the discussion between two people who do not have any idea about that". Teacher C who said, "I realise that I cannot expect to have more clarification from my colleagues", was planning to contact the facilitators for a discussion, but said, "I do not know where to begin". During a discussion in this follow-up week, Colleague K reminded me to be more proactive towards the teachers.

Remember our previous experiences in conducting research collaborating with junior high school teachers. They tended to be spoiled, and expected to be supplied with information. It was almost impossible to expect them to start or initiate something by themselves. (Colleague K)

The teachers' responses during the follow-up week and Colleague K's comments raised my concerns about whether the teachers were still interested in the study, "Could I expect these teachers to continue to participate in my whole study until finished?" (Researcher's journal). Nevertheless, all teachers indicated that despite the difficulties, they wanted to continue participating in this study. Teacher G stated that, "If I have problems, aren't you available for assistance?" Teacher H, who had conducted AR before said, "I am glad that I can start this study with AR workshops first. I believe it will give me a clearer idea about AR, rather than if I conduct the research right away". Teacher A whose husband was in the final process of completing his masters degree encouraged me, "From my husband I know how difficult it is to do higher study. I will help you as much as I can".

The second workshop focused on identifying research problems that would be implemented in the AR and reviewing the literature. The first twenty minutes of the workshop was used to review the previous follow-up activities conducted by the teachers. *Colleague K* and I then presented papers on how to select research areas, and to develop and focus the areas into feasible research problems. The materials presented in the workshop were taken from various references (Burns, 1999: 53-64; Macintyre, 2000; Nunan, 1989c: 18-19; Richards, 1990: 126-127; Richards & Lockhart., 1994: 1-4; Wallace, 1998) and were selected and developed to assist teachers to choose focused research problems. To assist the teachers, firstly they were asked to reflect on their teaching practices and produce five aspects which they wanted to change or to improve. Secondly they were

asked to choose one of them. Then, the teachers were asked to elaborate the selected topic into five areas of investigations. From these, the teachers chose one of them. The next step was to generate as many questions about the selected area of investigation. Finally, they had to choose one question which would be developed and used for their research. The teachers were advised to choose one focused research question which

...should be worth conducting but achievable for the teachers to undertake in the limited time available for the research, the length of time (one term) for the study, the resource availability, and their research capability. (Researcher's journal)

Similarly, teachers were reminded to the idea that AR was small in scale, practical, and realistic to teachers' situation and limitation, as suggested by McNiff, Lomax and Whitehead (1996). Despite the difficulties in choosing and focusing the specific topics for their research, all teachers indicated that they had plenty of classroom problem collections that they wanted to overcome or to change, "When they were asked to identify research areas all teachers were able to produce right away all the five research areas as required" (Researcher's journal). However, in developing the research areas into further stages, they underwent difficulties. One particular teacher, Teacher A, showed her confidence in completing the task, as she was able to select the focused question on the same day of the workshop. About her promptness, Teacher A said, "This problem has been with me for a long time. So, it was like saying something which is already on the tip of my tongue". Teacher D and Teacher H were able to produce the five areas of investigation and select one of them. However, while Teacher H began to write some questions for her selected area of investigation, Teacher D still was not able to make up her mind in selecting one of the areas of investigation until the second workshop finished.

In Teacher J's case, while he was still in the process of generating questions, at the same time he also thought about the findings. This restrained him from producing as many questions because as Teacher J said, "I don't write questions which I am not sure with the answers". Other teachers required direct assistance over the following week to complete the whole assignment. These teachers indicated that they needed support in the content of the questions.

In most cases, the challenge for the teachers is more to produce good content questions rather than grammatically correct ones. They often have to be reminded that they should choose a question which is worth investigating but feasible for their situations. (Researcher's journal)

The selected questions were developed into research plans through proposal writing before being implemented in their research. This was conducted in the fourth workshop. Further discussions of the topics which were investigated in their research will be discussed in section 4.3.2.2.

In the session that followed, teachers were introduced to ways of reviewing the literature and finding references from libraries and the Internet. *Colleague K* and I also introduced teachers to a list of people who had personal libraries and did not mind lending their books. Concerning finding references, I wrote in my journal, as in the following.

I am not sure whether it [introducing various kinds of references to the teachers] will be favourable and applicable to the teachers. However, I have to introduce them to this. At least to let them

know the possibilities and choices of finding references. (Researcher's journal)

The follow-up activities of the second workshop, as summarised in Table 4.4, aimed to develop teachers' skills in selecting research areas. Teachers were encouraged to reflect on their current teaching practice and decide what aspects they would choose to change. By focusing on a certain aspect of their teaching, it was hoped that teachers would begin to develop and generate focused research questions.

At the beginning of the third workshop, teachers undertook small group discussions to share ideas about their previous assignment, which was to generate research questions. Three teachers worked effectively and required little assistance. These included *Teacher A* who had completed her task in the previous week, and Teacher H and Teacher D. Not only did they produce research questions but they also chose one focused question to use in their AR studies. Four teachers produced potential research questions which needed further refining and focusing. One teacher, Teacher E was unable to attend this workshop because his mother was admitted to the hospital. The other two teachers only partially completed the assignment. These teachers identified the areas of research interest, but they did not produce research questions. While one of these two teachers learned quickly from the focus group discussion, the other teacher, Teacher F asked, "I am not sure how to focus the problems?" She obviously needed more assistance in developing and generating focused research questions, "I will give Teacher F a call tonight to help her to complete this task"

(Researcher's journal). The third workshop was mainly devoted to discussing how to collect and analyse data. The discussion especially focused on how to keep diaries which would be produced by the teachers throughout the whole period of AR study.

As mentioned in Chapter Three, diary writing was chosen among other techniques for promoting reflective practice because relatively it did not need extra equipment such as in audiotaping lessons. Once the teachers had identified some possible questions, strategies for conducting reflections and writing diaries became the focus of the main discussion in the third workshop. Teachers were provided with models and samples of diaries written by other teachers. For the follow-up activity, as summarised in Table 4.4, teachers were asked to write reflections on their teaching in their diaries.

The fourth AR workshop began by discussing the diaries. Despite the models and guidelines of diary writing presented in the third AR workshops, teachers indicated their difficulties in diary writing particularly in formulating what to write and expressing their ideas or insights. All of them complained that it was difficult to develop the diary entries. Teacher A, for example, who perceived that diary writing was a teenager activity said, "Now I know that I have been under estimating the diary writing". Teacher J admitted, "I was not used to doing it and felt a bit funny to tell about myself". Teacher C's difficulty was finding time to write as she said, "It was hard for me to spend time only for writing diaries at home. I am tired and just do not have time to do that".

The rest of the fourth workshop was spent in discussion about writing the AR proposal and the research report. Models and samples of reports were provided to illustrate the writing an AR proposal. It was anticipated that teachers finishing the workshops would be able to produce a research proposal which would be used as a guideline in implementing AR. During the discussion the teachers complained about their ability to write. Apart from writing a proposal, *Teacher J*, for example, became very worried about writing the research report, "How do you expect us to be able to write a [AR] report?" However, when I showed him and other teachers samples of AR reports (from Richards & Lockhart., 1994) which were "simple, straightforward and relatively short" (Researcher's journal), the teachers became more relaxed. I assured them that there would be assistance in helping them write. Table 4.4 illustrates that for the follow-up activity teachers were asked to write AR proposals. They were expected to refine their research question and develop it in the proposals.

In the fourth workshop *Teacher E* was again not able to come. As in the third workshop, *Teacher E* had to take care of his sick mother. His absence will be further discussed in a case study, Chapter Five section 5.4.

The AR workshops finished one week before the second term ended. There was a one-week break before the third term commenced. During this holiday teachers completed their research proposals. In the third term that followed, the teachers started to implement AR in their classes.

4.3.1.3. Teachers' responses to the action research workshops

This section investigates teachers' responses to the AR workshops. This included teachers' perceptions about learning AR through the AR workshops, and their perceptions about the AR workshops themselves. The data were collected through interviews with the teachers, observations, and reflective notes written by the researcher. Teachers' responses to learning AR and perceptions of AR workshops are discussed in the following sections.

4.3.1.3.1. Teachers' perceptions about learning action research

During the AR workshops, the teachers were introduced to the concept of PD, and the nature of AR, which were previously discussed in section 4.3.1.2. In addition, the teachers were also introduced to the methodology for conducting AR. This included diary writing that was chosen as one of ways to develop reflective habits. Teachers were also asked to write a brief AR proposal for their research. All of the aspects above were conducted in the workshops in order to prepare and to support teachers for the implementation of AR. Initially, the teachers indicated that they had difficulties in understanding AR. Interviews conducted after the first workshop revealed that grasping the idea of AR was not easy. These difficulties were described by *Teacher B* as, "AR is difficult," and *Teacher F* who complained, "If only I knew that AR was this difficult, I would not have joined these workshops". However, after the second workshop in which they were asked to identify and to focus on research topics, teachers indicated

that their understanding of AR was improving. In the third workshop the teachers reported that their comprehension of AR became clearer when they were asked to put the steps and the procedures of AR into their teaching contexts. Teacher A, for example, expressed her experience as follows, "Firstly it was difficult to grasp the idea of AR, but it became easier when I started identifying and focusing research problems". Teacher B indicated that her understanding was improving in line with doing the assignments in the workshop, "I found it easier when I did it". Teacher F who complained about her difficulty in the early workshop reported that she could more easily comprehend the nature and the process of AR when she put it in her teaching context, "... AR made sense after I put it in my teaching context".

4.3.1.3.2. Teachers' perceptions of action research workshops

Despite problems and impediments during the AR workshops, teachers responded positively towards the workshops. When interviewed, all teachers indicated their appreciation of being able to participate. In particular, they had positive responses to the opportunity to meet and to share ideas with other teachers. Teacher D indicated what she liked from the AR workshops was, "... sharing ideas". Teacher I also reported that sharing ideas was beneficial, "I benefited from this discussion. I learnt a lot from other teachers' cases and questions. Sometimes other questions were actually my problems too". Teacher E described the workshops as the, "... opportunity to meet other English teachers from different schools".

The following comments indicate the aspects of the workshops which the teachers found benefited them. Teacher B reported, "Listening to other teachers' cases helped me to formulate my own problem for AR". Being able to share ideas helped Teacher H to gain confidence since, "Knowing other teachers' problems helps me a lot. It makes me feel all right as I am not alone". For Teacher J, sharing ideas were described as outlets to release the tension where he could, "... freely express my disappointments I have long kept about the school, and about MGMP", so that he became more relieved and relaxed by the end of the workshops.

Teacher A, comparing AR workshops to other PD programs, stated, "What I like from the workshops is that the materials are relevant and applicable to my teaching situation". This was supported by Teacher F and Teacher G who indicated that they were not satisfied with a previous AR seminar in which they had participated. They indicated that learning through workshops provided them with a better comprehension of AR. Teacher G reported that the workshops allowed her to, "... have continuous assistance through discussions with the facilitators and the colleagues". Teacher F indicated that the workshops enabled her to work at her own pace because, "I could always ask again and again the steps of AR which I do not understand".

Nevertheless, despite the positive perceptions of the AR workshops, teachers also indicated some negative aspects. These related especially to reading the materials. After the first workshop, the notes on AR and PD were distributed to the teachers. Teachers were asked to read these notes during the follow-up

activity so that they had better comprehension of AR and PD. However, when interviewed, eight teachers indicated that they did not complete reading the notes. Apart from time constraints, which all teachers experienced, some teachers mentioned their workloads, a low interest in reading, and the difficulties of comprehending the readings, especially English texts, as aspects which hindered them. A low interest in reading was the main concern for all the teachers, although the level of interest was varied for each teacher. For Teacher G, for example, "I just do not want to read", and Teacher J, "... no time and too lazy to open the notes". This response was not just expressed in the first workshop. In the interviews, teachers indicated that they had difficulties in comprehending the readings which were in English. Teacher F, for example, reported that she was very slow in reading because, "I did not know why but I think the topic is difficult to understand". As for Teacher H, she assumed that it was a matter of habit, "... just not used to reading". Teacher D commented that a low interest in reading was caused by her limited range of reading, "I hardly read reference books. What I usually read was the materials for my teaching".

Another aspect of the workshops that was perceived negatively was the follow-up activities. The teachers were asked to complete various activities, such as reading materials, diary writing, and developing research topics. These activities were designed to enable teachers to gain better comprehension of the materials presented in the workshops. The teachers indicated a variety of problems in completing the activities. *Teacher F*, for example, said that "The follow-up activity is like a homework, and I do not like homework". Teacher B, like many

other teachers, was concerned about not being able to carry out reflection on practice consistently because of time constraints, "No time to think, let alone to write reflections". Teacher F and Teacher G indicated that for the follow-up activities they were not enthusiastic about writing. Teacher G said, "Ask me whatever you want, as long as not writing". Teacher F reported that diary writing was demanding because, ... it made me think". However, not all the teachers perceived thinking as a burden, as stated by Teacher C, "AR is worth doing since it forces teachers to think." Teacher D, as another example, did not deny that the activities during the workshops were challenging and forced her to think about her teaching practice, "... never did I have to look at my teaching this way". Yet Teacher D perceived thinking positively as a means of, "questioning my teaching which allows me to see the weakness and the strength in my class". Teacher D said she benefited from this thinking activity because, "I could improve my teaching". Teachers indicated that diary writing was unfamiliar as reported by Teacher F, "I am not used to write diary". Unused to a free writing style, "Writing is not easy for me, let alone in English", Teacher G indicated that she wanted the researcher to provide structured or guided questions or statements for diary writing, " ... so I do not have to think about making sentences, just fill in the blanks".

The discussion in this section reveals what and how teachers learnt about the nature and the process of AR, research skills, diary writing, and proposal and reports writing through the workshops. The discussion also highlights a number of varied responses related to difficulties encountered by the teachers, and

aspects which were hindering and inspiring to them during the workshops. As the workshops were meant to prepare and to support teachers in AR implementation, the findings during the workshops emerged as important inputs on how teachers would undertake AR. Hence, in the AR implementation, aspects which would hinder the teachers could be anticipated; at the same time, aspects which would motivate them could be promoted.

This section has discussed the AR workshops. The next section presents the second stage of the *processes of teachers'* AR which focuses on the implementation of AR.

4.3.2. Implementation of teachers' action research

This section focuses on the experience of the teachers during the time they conducted AR. AR implementation was conducted after teachers finished participating in the workshops when each of them was ready with a topic for the research. Teachers undertook AR in their classes during the third term, from the last week of March – June 2002.

The discussion in this chapter focuses on various aspects of the implementation of AR, such as the steps of AR implementation, the research topics selected in the teachers' AR, the teachers' perceptions about AR as a learning process, the teachers' perceptions about the benefits of AR, and the difficulties experienced by the teachers including the solution and strategies they suggested. Each of these aspects is elaborated in the following sections.

4.3.2.1. Steps of the action research implementation

Once the workshops were completed, the next step which was the AR implementation process began. This was conducted during the third term which lasted for 14 weeks. Teachers conducted research based on topics which were developed during the workshops (see section 4.3.2.2). Throughout their AR projects, teachers wrote diaries and participated in focus-group discussions. In order to monitor the process of their research, teachers were interviewed every week, and their diaries were discussed. The interviews were usually conducted after a teacher finished teaching or on the same. In brief the schedule during the implementation of AR is summarised in Table 4.5.

Table 4.5: The Schedule during the Implementation of Action Research

Week 1	To start AR
Week 3	To participate in focus group discussion 1
Week 5	To participate in focus group discussion 2
Week 7	To participate in focus group discussion 3
Week 9	To participate in focus group discussion 4
Week 10	To start writing AR reports
Week 12	To complete the AR reports
Week 13	To prepare posters and to prepare papers
Week 14	To present poster and to present paper in the seminar

As shown in Table 4.5, group discussion took place fortnightly. In total there were four group discussions. In the discussions, each teacher exchanged the following information: their perceptions of the progress, difficulties, and latest findings of the research. After each report, there was a session where other teachers asked questions, and gave suggestions. As in the AR workshops, teachers had positive perceptions about the group discussions. The difference

was that the discussions during the AR implementation were perceived as more interesting than in the workshops. Teacher A said it was because, "The discussions were more focused on the research". From one discussion to the next, teachers indicated that they were more confident to talk and share their ideas, "Almost all teachers talked more confidently in the discussions, such as sharing their research progress, expressing difficulties, and offering solutions" (Researcher' journal). This was supported by Teacher I who reported, "It became easier to share ideas in the discussions. It was not the same as in the AR workshops where I was a bit self-conscious to talk about my teaching and my problems". However, there were some teachers who reported that they were anxious before the discussions. My observation revealed that this occurred for teachers whose progress was not well identified. Teacher C in requesting my assistance said, "Tell me what to report in the discussion this week, I don't have anything to say". In line with this, my journal revealed,

Teacher C's cycle was actually all right. But she could not identify the steps she made in the cycle. This is because she did not have a record. I have to look back in my notes to help her tracking her progress. (Researcher' journal)

As illustrated in Table 4.5, all teachers started conducting AR at same time at the beginning of week 1. However, they did not complete AR at the same time. Some teachers completed the whole process of AR very smoothly, such as *Teacher A* and *Teacher H*. My journals revealed that certain factors played important roles in their research acceleration.

Both Teacher A and Teacher H had positive perceptions about AR. In addition, the quality of the students which Teacher A taught also help her in doing her AR. From what she said, her

students were smart and found it easy to understand her instructions. In Teacher H's case, her prior experience: knowledge and involvement in AR facilitated her research. (Researcher' journal)

My reflection was supported by Teacher A who said, "In one go, I could explain two or three tasks together and my students could do the tasks very well", and Teacher H who reported, "AR has fascinated me. My research in this study is even more fascinating. I feel that I have better understanding of what AR is, especially because you prepared us about AR through the workshops". Other teachers indicated various levels of development and difficulties in completing their research. "In most cases, teachers had difficulties in identifying the progress of their research. Often, one cycle did not connect very well to the other" (Researcher's journal). Teacher I who invited his students to write test items complained his difficulty in continuing further cycles, "The findings in the first cycle were plenty that I found it difficult to prioritise which to develop in the next cycle". After a discussion, in which I assisted him in choosing relevant issues to develop, he continued his research more smoothly. Teacher J who used a game in his teaching complained that his research "seemed never-ending". Teacher J analysed that this was because, "My vocabulary games became so detailed that it was difficult for me to see clear cuts between one step to the others".

Teachers who had finished their AR started to write their reports. As summarised in Table 4.5, the report writing occurred in week 10 to week 12. Once the report writing was completed, it was continued with writing papers for a seminar and

preparing posters. Report writing, AR seminar and poster presentation will be further discussed in section 4.4.1.

Overall, the discussion above has covered the step AR implementation. It depicts the activities conducted by the teachers in undertaking AR in their classes. In the following sections, research topics which were chosen by the teachers for their research will be presented.

4.3.2.2. Topics investigated in the teachers' action research

As mentioned in section 4.3.1.2, teachers were asked to develop topics which would be investigated in their research. Table 4.6 below, summarises the topics that were investigated in the teachers' research. It describes the topics of the research, the classroom issues or the problems identified, the solutions to overcome the problems, and the research findings.

Table 4.6: Topics Investigated in the Teachers' Action Research

Teacher A (see more detailed in section 5.1)

Topic:

Teaching speaking outside the regular classroom.

Issues:

- Students needed to be provided with more chances to practise their speaking.
- Speaking classes were noisy and disturbed other classes.

Solutions:

Teaching speaking in the hall.

Findings:

- Teaching speaking in the hall provided the students with plenty of time to practice speaking.
- The students' speaking ability was improving.
- There were no more complaints from neighbouring classes about noise.
- Students' feedback, as reported by Teacher A, revealed that the speaking class was more interesting. They felt freer, and more confident in speaking.
- Teacher A was impressed by the flexibility of AR that she adopted in her teaching practices.

Teacher B

Topic: Increasing students' motivation through games.

Issues:

• Not many students actively participated in the class.

• There were three students who were very quiet and needed more motivation.

Solutions:

Using competition games in teaching reading.

Findings:

- The classroom atmosphere became more alive.
- All students actively participated, including the three students.
- Students' feedback, as reported by Teacher B, revealed that they became more enthusiastic in learning.
- Teacher B felt that using games promoted her creativity and had positive impacts on the teaching and learning process.

Teacher C (see more detailed in section 5.3)

Topic:

Choosing teaching materials for a tired teacher.

Issues:

- Teacher C suffered from burn out because of heavy workloads.
- As a tired teacher cannot teach effectively, *Teacher C* reported that she had to be able to respond to this situation appropriately by choosing not too demanding and too time consuming to prepare but interesting materials.
- Students were not motivated to study.

Solutions:

Using ready-to-use materials which were interesting and not too time consuming for preparation, presentation, and correction. She chose to use Grammarchants: More Jazz Chants (Graham, 1993) and cassettes.

Findings:

- Teaching of the speaking class with Grammarchants: More Jazz Chants with its cassettes increased the students' motivation, enthusiasm, and participation.
- Students 'feedback, as reported by *Teacher C*, revealed that practising English from the cassette provided a native speaker model so they felt they had better pronunciation and intonation. The utterances they practised were applicable, such as when they spoke to tourists.
- Teacher C said that using Grammarchants: More Jazz Chants with its cassettes in her class solved her problem of presenting interesting lessons in her unfavourable situation.

Teacher D

Topic:

Optimising brainstorming in teaching speaking.

Issues:

- The pre-speaking activity was not effective and efficient, as students were busy finding words in the dictionary, and wrote the speaking tasks (conversations).
- It was also time consuming and there was not enough time to practise speaking. Using and optimising brainstorming in the pre-speaking activity.

Solutions:

Findings:

- The pre-speaking activity became more focused, and did not take too much time.
- There was more time for students to practise speaking.
- Students' feedback, as reported by Teacher D, revealed that they became more prepared to anticipate what to cover in certain topics, and were more confident in practising speaking.
- Teacher D gained a sense of control in her lessons, and it was easier to prepare her speaking class.

Teacher E (see more detailed in section 5.4)

Topic:

Using translation to improve students' reading comprehension.

Issues:

- Students' reaching comprehension was low.
- Students did not have enough vocabulary and were not familiar with using dictionaries.
- Not many students participated actively in the reading class.
- The classroom atmosphere was not relaxed and enjoyable.

Solutions:

Applying translation as the pre-reading activity, asking them to use dictionaries: giving rewards to motivate their participation, and trying to be friendlier and more helpful.

Findings:

- Using translation as the pre-reading activity which was meant as a 'shock therapy' had positive impacts because the students became more prepared for the lessons.
- Motivating students was very important to increase their enthusiasm in learning.
- Students' feedback, as reported by *Teacher E*, revealed that they enjoyed the new situation in their classroom which was more relaxing and enjoyable to study. Some written comments from the students indicated that they hoped *Teacher E* would teach them again in year 2.
- Teacher E felt that his attempts to get along well with his students were rewarding. It improved the classroom atmosphere, and bridged the gap between him and his students so that there was an open communication in the class.

Teacher F

Topic:

Improving students' ability to identify main ideas in paragraphs.

Issues:

- In reading exercises and in the national examination, there were always item tests to identify main ideas of paragraphs.
- Students often took the first sentence in the paragraph as the main idea which was not always correct.

Solutions:

Finding effective techniques to help students to identify main ideas more easily. Adopting techniques which enabled students to comprehend the reading text faster, grouping the students, and explaining in more detail steps of identifying main ideas.

Findings:

- From one cycle to the other students' ability to identify main ideas increased.
- Grouping students created a better learning atmosphere.
- Students became more active: asking questions and sharing ideas in the group.
- Students' feedback, as reported by *Teacher F*, revealed that they found it easier to find main ideas, liked the different class atmosphere, the learning process was more enjoyable.
- Teacher F felt more enthusiastic in helping her students.

Teacher G

Topic:

Preventing cheating and promoting students' motivation.

Issues:

- In the structure class, most students were not enthusiastic to answer questions and to complete tasks.
- Some students cheated in doing tests.

Solutions:

- Using strategies which could change student's attitudes from mark oriented to learning process oriented, and decrease chances of cheating: explaining the lessons in more detail, appointing students to do exercises on the blackboard, and giving marks as a reward.
- Alerting the students about spontaneous tests.

Findings:

- Better explanations, reasonable exercises, teacher's assistance, and rewards helped students to have a sense of achievement which increased their motivation to learn better.
- Appointing students to do exercises in front of the class, and spontaneous tests to some extent decreased the opportunity to cheat.
- Students' feedback, as reported by *Teacher G*, revealed that they gained more confidence in doing the exercises. The spontaneous tests had forced them to be more serious to study.
- Teacher G felt that she benefited from increasing her ability to choose better teaching techniques and to create an enjoyable class atmosphere.

Teacher H (see more detailed in section 5.2)

Topic:

Negotiating lessons with students.

Issues:

- Students were passive, not enthusiastic, looked tired, and had low test achievements.
- Five students had attendance problems.

Solutions:

• Distributing questionnaires to the students to investigate their learning preferences.

Findings:

• Negotiating the lessons based on their learning preferences.

- Negotiating teaching-learning process with the students improved the unfavourable class situation which Teacher H investigated in her research: poor attendance, student laziness, and student passive attitude.
- Since the negotiation provided her with data of student preferences, it helped her to become more relaxed and focused to prepare teaching.
- Students' feedback, as reported by *Teacher H*, revealed that the new approach gave a different atmosphere which motivated them to study better. They felt that learning English was an interesting experience.
- Teacher H felt that she had expanded her roles as a teacher as she also placed herself as a friend in teaching.

Teacher I

Topic:

Improving students' preparation for tests.

Issues:

- Students' test achievements were very low, even in the parallel classes that had the same type of tests, presumably the students had the opportunity to know the tests from the other classes.
- There were only three students whose test scores were 6 or more.
- Survey conducted by *Teacher I* suggested that more than 50% of his students did not study to prepare a test.

Solutions: Findings:

Inviting students in groups to make raw test items.

- The first test revealed that the students whose scores were 6 or more increased from 3 to 14 students and in the second test there were 19 students.
- Teacher I reported that interviews with his students revealed there were more students who studied prior to his class and to prepare for tests.
- Students' feedback, as reported by *Teacher 1*, revealed that they had a sense of being involved in the class which motivated them to pay more attention to what they studied.
- Teacher I reported that through AR he was able to take an "unthinkable-before" strategy to overcome his classroom problems.

Teacher J

Topic:

Increasing students' motivation through games.

Issues:

Overall class situation was not favourable: low student's test achievements, low students' participation, low motivation, and problems of discipline.

Solutions:

Using vocabulary games to improve classroom atmosphere.

Improving ways to approach students, becoming friendlier and more helpful.

Findings:

- Students showed greater interest in the lessons. Their participation also increased as they often asked questions, which almost never occurred before.
- Vocabulary games helped the students to enrich their vocabulary which in turn enabled them to produce more sentences and increased their participation in group discussions.
- Students' feedback, as reported by *Teacher J*, revealed that they enjoyed the different approach in the class. English class was not frightening anymore.
- Teacher J reported that he gained a different perspective on approaching his students as he realised that he became friendlier to them. This affected the classroom atmosphere which became more relaxed.

Richards and Lockhart (1994) suggests that AR aims to make changes and to make improvement to the current teaching and learning. In this study, as shown in Table 4.6, eight teachers focused their research on making improvement in their class, and the other two teachers were classified into making changes. In my journal, I noted the following entry.

Most topics concerned overcoming students' problems in order to improve the class, and only two topics related to change teaching practices as conducted by Teacher A and Teacher C. Basically Teacher A did not encounter many problems in teaching speaking, as her classes were usually "dynamic" (Teacher A). However, she needed to teach speaking in the hall to provide her students with more opportunities to practise speaking. In Teacher C 's case, she needed to choose interesting techniques and materials, as she wanted to improve the classroom atmosphere. (Researcher's journal)

In identifying problems for their research, seven teachers focused on the students' problems such as low motivation, low participation in the lessons, and low-test achievements. Three other teachers, in identifying the problems, considered themselves as parts of the problems. My journal noted that,

Among the ten topics, there were three cases in which teachers thought that they contributed to the problems. Teacher C thought that her low motivated students were because she was not enthusiastic in teaching because of her lack of energy (for further details see section 5.3). One of the problems investigated in Teacher E's research was his communication gap with his students [for further details see section 5.4]. Teacher J thought that his unfavourable class atmosphere was closely related to his assumption that he was not friendly to his students. (Researcher's journal)

My journal entry in the following reflected my comments about the importance of teachers' ability to reflect and to identify their research problems more widely.

Teachers need to identify the problem more critically and holistically, not to see the students' problems as theirs only. To some extent teachers' abilities to teach and their personal approach to their students may cause problems. When Teacher F

wanted to improve students' ability in identifying main ideas of paragraphs, for example, I was a bit curious about her ways of teaching the main ideas. May be the problem related to her teaching practice, not being able to explain it well, and not only on the students' abilities. (Researcher's journal)

When I raised the issue of identifying problems critically and holistically, Teacher J, who considered himself as part of the problems, responded that he was inspired to reflect on this idea from diary writing. Despite the difficulties, Teacher J said that what he learnt from writing diaries was,

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 J)

Teachers reported various ways of choosing strategies to overcome the problems that they investigated in their research. Teacher A indicated that she used a strategy which had occurred to her before she conducted her research. However Teacher A did not implement it previously because she, "... did not dare to speak about this to the principal. But now I am using it because I have a strong reason for using it for my research". Teacher H reported that she re-used a strategy which she once used before. One of the strategies which she implemented in her research was teaching her students in the backyard. Teacher H reported that when she used it before, the vice principal appealed to her not to do it anymore because it was, "...beyond the usual teaching patterns" (Vice Principal as reported by Teacher H). However, since she realised that it improved the classroom atmosphere, she asked permission to her principal to

reuse it. As in *Teacher A*'s case, *Teacher H* reported that she believed she had a strong reason to use that strategy because she conducted it in her research.

Some teachers adopted strategies of teaching techniques which were not popular and were not recommended in English teaching in Indonesia which implemented the communicative approach. *Teacher C*, for example, drilled her students' oral practices through cassette recording; and *Teacher E*, as another example, used a translation technique as one of the pre-reading activities. Interviews with *Teacher C* and *Teacher E* revealed similar reasons, that they were willing to use different approaches from those they usually conducted because, "*The strategies were good for the classroom situations*" (*Researcher's journal*). Further descriptions of *Teacher C's* and *Teacher E's* research are in sections 5.3 and 5.4.

Some other teachers reported that they chose strategies which were "unthinkable before". Teacher H, for example, negotiated her lessons with her students; and Teacher I, as another example, invited his students to write raw test items. In my journal I commented on Teacher H's strategies as follows, "In the Indonesian context, teachers usually dominate their classes. It is unusual to involve students to plan the lessons" (Researcher's journal). Teacher H reported that she was inspired by and adapted this strategy from the AR workshops she attended for this study. Teacher H said that, "I experienced a positive atmosphere. There was a sense of equality where everyone felt appreciated and was free to talk". Further discussion of Teacher H's strategy conducted in her research is described in section 5.2.

Teacher I reported that he wanted his students' tests achievements to represent their own competence. However, he indicated that he was disappointed with the low achievement in their students' tests. In identifying the problems, he wrote the following entry in his diary.

Why did most of them get low scores? There were three possibilities: in supervising tests I did it so tightly that there were no chances for cheating; the test items were too difficult; what was studied by the students was not found in the tests. ... In this research I want them to make raw test items which will be edited for the real tests. This will also reveal their comprehension and how far they learn from my lessons so that I will be able to do remedial teaching on difficult materials. (Teacher I)

In his research findings, as summarised in Table 4.6, *Teacher I* reported that this unusual strategy had positive impacts, not only on his students' test achievements but also on changing their attitude into being more responsible in preparing tests.

As shown in Table 4.6, all teachers reported that their research yielded positive results. The positive results occurred in response to the classroom issues or problems that they investigated in their research. This included the improvement on the students, the teachers, and the classroom atmospheres. The following entry as noted in my journal revealed my comments about the teachers' research findings.

All teachers reported that the strategies they conducted in their research had answered or solved the problems that they investigated in their research. Most teachers who encountered students' problems reported significant improvements, such as increasing attendance and test achievement, and that their students became more motivated which increased their involvement in the class. Teacher E and Teacher J found they

became more patient in their classes and felt they were able to get along better with their students. Teacher C found it was more relaxing to teach her class, although she was still very busy with her tight schedules. (Researcher's journal)

The discussion above has described the topics which were selected by the teachers for their AR projects. It includes the solutions need to overcome problems, and the summaries of the research findings. In the following sections, teachers' perceptions of AR and the challenges in implementation will be presented.

4.3.2.3. Teachers' perceptions of action research as a learning process

To investigate the benefits of conducting AR, teachers were asked, "What are the most significant things you have learned in carrying out your AR?" Teachers' responses revealed various aspects which included raising awareness, improving classroom atmosphere, solving problems, and empowering teachers. Some teachers indicated that they gained increasing awareness of their teaching. Teacher D, for example reported that her self-reflection was improving, "AR made me more self-reflective", which, "helped me to improve myself". Teacher D elaborated that AR helped her to become, "... more aware of the importance of monitoring whether my approach to teach was effective, and whether my students were learning or not".

Teacher J indicated that initially he was not comfortable with the idea of reflective practice, either when he wrote in a diary or when he shared with other

colleagues in the fortnightly focus group discussions, "... especially because I felt naked".

However, Teacher J perceived reflective practice positively when he began to,"
... enjoy being honest with myself'. Teacher J benefited from the reflective
practice as, "I could improve my teaching, my class, and myself. I also enjoyed
being able to get along well with my students". Teacher J even asked himself,
"Why didn't I do this earlier?"

From the aspect of raising awareness, Teacher G benefited from evaluating teaching, "Every time I taught I became more aware of my weaknesses". Based on these weaknesses Teacher G, " ... tried to improve my weaknesses in the next class".

Teacher H, as another example, indicated that her increasing awareness facilitated her in recognising the potency in her class, "I was more able to recognise my potency as well as my student's potency". From this, Teacher H benefited from improving teaching, "...and it also became easier to recognise what to improve in teaching".

Other teachers felt that their involvement in AR enabled them to improve their teaching, and the classroom atmosphere. For example, *Teacher J* criticised himself for being unable to establish a positive atmosphere in his classroom. *Teacher J* suspected that the unfavourable class situation was partly because he could not be flexible with his students, "I was not patient with my students". He

indicated that he was often unsuccessful in managing his temper in the class, "I could get easily angry in the classroom". Teacher J raised this problem in his AR, and in trying to solve it he implemented emotional management by being more patient. In addition, he used games in his lesson. From time to time during his AR, Teacher J indicated that the atmosphere in his classroom was improving. Teacher J reported his classroom as, "... happy and productive".

Compared to the situation before he conducted AR in which the students were seen as being passive, Teacher E was positive about the improvement in his class after the study, "Teaching became less stressful ...classroom atmosphere became more dynamic". Teacher E, who applied translation as a technique in his AR, also indicated that his students asked various questions in the class and, "It was easier to understand the students' feelings. I think I could get along with my students better". Teacher E reported that this improvement raised his motivation as he said, "I became more engaged with my teaching, more careful in preparing the lessons. And I became more diligent in correcting the students' work".

Teacher I, who asked his students to write test items during his AR, reported the improvement of his classroom atmosphere as,

The process of teaching and learning was more fun as students were more motivated...I am proud of myself since what I taught was understood by my students. My students were more involved in the lesson and they asked lots of questions. (Teacher I)

Some other teachers indicated that AR assisted them in solving their teaching problems. *Teacher B*, for example, reported that she felt positive about AR

because the games which she used could motivate her students to be more active. No students, as *Teacher B* said, were left behind in participating in the lesson. Even three students in her class who used to be very quiet were able to be more active and enjoyed her lessons. *Teacher B* emphasised the advantages of AR as,

What I learnt 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 B)

Teacher A who had problems in teaching speaking said,

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. (Teacher A)

Another aspect of AR that was beneficial for teachers was *empowerment* in which teachers indicated they had more choices, authority, and confidence in conducting their teaching. *Teacher H* for example, who negotiated the lessons with the students through her research, indicated that she had gained more freedom in her teaching.

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 H)

Teacher I reported that he conducted an "unthinkable-before strategy" in his class, asking his students to write test items, "Without AR I would never involve my students to write test items". Yet he applied this because he indicated that it was positive in improving his students' achievements.

Teacher B reported she became more confident in choosing strategies which she considered best for her lessons. Through AR Teacher B indicated that she gained evidence that teachers were the manager in their classes. This understanding helped her in supporting her decision in conducting teaching strategies, as Teacher B said, "This is what teachers should exercise in their practice: having alternatives and being confident with their choices". As she had become very interested in this aspect of research, Teacher B asked for my assistance in seeking references to support her beliefs. The reason for doing this was that in her situation she underwent "conflict" with one of her colleagues who questioned her for not teaching as guided by the curriculum. Teacher B commented that a reference would provide significant support when she was criticised, "Next time he criticises me, I can defend myself with the book".

In another case, *Teacher E*, who used translation in AR, was also criticised by a teacher educator, as this strategy is not recommended in the *communicative* approach adopted in teaching English in Indonesia. However, *Teacher E* argued that translation was used temporarily as a strategy which he believed would improve the students' vocabulary. In the process of AR he became more confident in his belief since *Teacher E* was able to improve his classroom atmosphere, and in his students' test achievement and motivation. As discussed in the next section, *Teacher E* 's research was successful in showing that translation could provide good support for his students' improvement. In addition to the learning process, teachers perceived AR positively compared to other PD

activities. *Teacher J*, for example, who compared AR with other research in his school, indicated 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 have 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 J)

Teacher B highlighted the "from the internal side" aspect in AR which she did not find in other kinds of PD activities, such as seminars and training courses,

I feel good with AR. In particular because everything was from my side: the problems were rooted in my classroom with which I familiarised quite well, and the solutions which I proposed were something which 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. (Teacher B)

Teacher H focused of the possibility to conducted AR at any time, "While teachers had to wait for their turns or rotation to be able to participate in other PD activities, we could do research any time through AR". Teacher H also appreciated the flexibility to, "implement research in between teaching".

As a learning process, *Teacher D* benefited from her raising awareness of requiring references to support her research. *Teacher D* used brainstorming to promote her students reading comprehension, but she said, "I am worried that what I do in my research is rubbish which is based on my fantasy only". However, after I lent her a book which described brainstorming (written by Underwood, 1989), *Teacher D* reported that she was more confident in implementing this strategy in her teaching. Similarly, *Teacher C* who suffered

from a lack of energy because of her heavy workload showed her enthusiasm when she visited the resource centre of the Language Centre in my university. She showed her delight to see the resources there.

As Teacher C was interested in one book but she was not the member of the library, she asked me about the requirement to be the member. She also asked me whether I could help her by borrowing the book for her. (Researcher's journal)

Teacher C indicated her enthusiasm as she showed the book to the other teachers in a fortnightly group discussion. She also suggested the teachers to visit the resource centre. Teacher C commented, "For a [lethargic/burned-out] teacher like me, the library is very helpful in providing varieties of easy-to-use materials".

4.3.2.4. Teachers' perceptions about the benefits of action research for their students

To investigate teachers' perceptions about the benefits of conducting AR for their students, teachers were asked, "What do you perceive as the most significant things your students benefited from doing your research?" All teachers reported that during the implementation of AR, the atmosphere in their classes improved noticeably. My journal noted my comments about the teachers' perceptions of the benefits of conducting AR for their students as follows.

The teachers indicated that their students became more motivated, more enthusiastic and more active in participating in the class. In addition, class interactions were reported to be more dynamic. In this respect, teachers reported that students showed more initiatives in asking questions and in sharing ideas in group discussions. (Researcher's journal)

In Teacher H's class, for example, there were two students who had problems of

low attendance. However, during her AR study in which she negotiated the lessons with the students, these two students increased their attendance and showed interest in her classes. *Teacher H* analysed this improvement as follows.

Probably there was a feeling of empowerment for the students that it was they themselves who created the rules and not just obeyed the rules as usual. Asking them to choose, to decide and to do what they wanted to do for the lesson was a kind of 'a new and surprising thing'. I'm glad that inviting my students to express their ideas about the class made my students happy too. (Teacher H)

As another example, *Teacher I* reported that his students usually gained low marks on tests. The students' achievement increased significantly when *Teacher I* involved his students in writing test items during his AR. *Teacher I* indicated he became more confident with his AR after he conducted the second test. From this test *Teacher I* compared the numbers of students whose marks were six and higher with the test result in the previous term before he conducted AR. The results of the tests were summarised as follows.

Test	Mark: 6 and <6 (out of 10)		
	Term II	Term III/AR	
Test 1	6 students	19 students	
Test 2	3 students	14 students	
Test 3	8 students		

Because "... it increased more than 200%", Teacher I said, "not only me, the students looked happy too with this". Teacher I expressed his positive feeling relating to the increasing achievement of his students as, "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 E reported that the students in his class were very passive. Based on his investigation, he identified that one of the problems was a lack of vocabulary. In his AR, Teacher E implemented strategies for improving his students' participation through translation assignments. Apart of the translation strategy was asking every student to use an English dictionary. In line with the increasing vocabulary of the students, Teacher E said that his students showed more active participation in the class, "...more free to express their opinions, less stressed and more fun in the class. I think they liked English and enjoyed it". In addition, the students' motivation was reported to be improving, as shown by the fact that the students asked *Teacher E* to hold an English speech contest in his class. The students conducted the contest not only once, but twice and I was invited to be the jury in the second contest. The students even asked him to organise an excursion to tourist sites so that they could practise English with "real people". Teacher E said that his students "challenged" him as he reported that one of the students said, "Sir, let's use the language ... not study in the class only". A further detailed description of Teacher E 's research will be discussed in section 5.4.

4.3.2.5. Challenges in implementing action research

During the implementation of AR, all teachers reported various challenges and problems. These problems as shown in Table 4.7 are summarised into general problems, research problems, and individual problems.

Table 4.7: Teachers' Difficulties in Implementing Action Research

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

As has often been documented in references about teachers' research (Burns, 1999; McKernan, 1996; Nunan, 1989a) the teachers in this study also indicated similar difficulties they encountered during their research which included difficulties in time management, limited funds, work overload, and a lack of confidence in completing the AR study. Of these problems, the teachers indicated that managing time dominated the difficulties. For female teachers, in particular, being a teacher, a mother and a wife was very challenging. Teacher H, for example, reported that journal writing at home was almost impossible when her children were around, "I just started writing, then my daughter wanted to sit on my lap". Teacher C who had very tight teaching schedules indicated that she preferred to undertake AR related activities only at school, "I hardly had time for my family". For male teachers, the problem with managing time was usually

because of other commitments. Teacher J indicated he needed extra time when he jokingly said, "Eight days a week would probably be good".

Table 4.7 also summarises problems that relate to the teachers research ability. During the research process, all teachers indicated they encountered challenges at almost every stage of the research.

The teachers reported they had difficulties with formulating and focusing problems, with recognising important aspects developed in the research, with collecting data and analysing it, with stages in AR cycles (planning, acting, monitoring, and reflecting), with diary writing, and with writing research reports. (Researcher's journal)

These difficulties are discussed as follows. In general, teachers found it difficult to develop research problems. Although the teachers indicated that there were unlimited topics to investigate, lack of confidence of their topics which occurred to some teachers affected the process of developing and focusing the final ones. Teacher F, for example, was concerned that her topic was not significant to investigate, as she said, "My topic is too simple for AR", and she worried that other teachers would question her research capability. Teacher G, who said that only lecturers who could conduct "proper" research indicated her concern about the worthiness of her topic, "Is this topic has academic value?" Teacher J, who compared his topic to Teacher A's topic, indicated that Teacher A's topic was more interesting than his, "How could she find such a good problem?" Hence, Teacher J tended to change to other topics, rather than focusing on and developing the previous one. This affected the amount of time it took for Teacher J to develop the final topic for his AR.

Teachers indicated that they encountered difficulties in conducting the research in the way it had been planned in their proposals. They reported that the flow from the stage of planning to the stages of action, monitoring, and reflection within one cycle and the flow from one cycle to the other cycles was not always smooth. In her case, Teacher C indicated that it was because the process was poorly documented. She said, "I did not have much time to reflect and rewrite my research. I often recorded mentally what I did in each stage of the cycle". By the time she reached a further cycle, Teacher C had to recollect the process of the previous cycle. This was not effective for her research, "I did not always remember the whole process". Poor documentation of AR affected not only the flow of the research, but also the recognition of important aspects that developed during the research. Failing to recognise important aspects in one cycle, in turn, meant failing to develop the next cycle. Teacher J, who implemented vocabulary games in his lesson, commented that the games were too detailed in their procedures, that he felt there were, "... too many steps to write", and that he often encountered difficulties to decide, "... plans for my next action strategy". In my journal I wrote, "Teacher C and Teacher J had to be reminded again and again about the stage of his research. Luckily, after interviews I always made brief notes on steps each teacher reached in the AR" (Researcher's journal).

In another case, *Teacher F*, who was concerned to improve her students' comprehension of main idea in sentences, reported she almost gave up her AR. By the end of the first cycle of the AR, *Teacher F* complained, "To this point I do not see any improvement in my students". She commented that the action

strategy she implemented in the cycle was unsuccessful. Hence, *Teacher F* considered changing to another topic. However, after discussion with me, *Teacher F* realised that she, "... was targeting too many improvement goals in the first cycle". After establishing clearer indicators for identifying students' improvements, *Teacher F* gained confidence in continuing her AR.

Overall it was observed that the teachers required considerable on-going support and continuous help with procedures in conducting AR, particularly in formulating the significant issues in the stages in one cycle and in developing these issues for the next cycle. In many cases teachers overlooked significant changes which developed in their research. *Teacher J*, for example, was not confident with his AR as indicated by the fact that he often said, "My research looks very simple". Only after discussion in which the important aspects were highlighted, such as improvement in his students participation and motivation, an increase in the students' test achievement, enhancement of the classroom atmosphere, development of the teacher's roles, did *Teacher J* became more confident with his AR.

Table 4.7 also shows difficulties that teachers encountered which were specific to the individual research situations, such as: teaching equipment, criticism from senior teachers, criticism from colleagues, lack of energy, lack of motivation, family commitment, and conflict with school priorities.

Teacher H said she had a problem in teaching listening, because the school did not provide equipment. Fortunately, Teacher H was able to borrow the cassette

player which was usually used for conducting ceremonies in her school. Although it required extra effort, "I have to bring the cassette player to the classroom and take it back to the storage room", Teacher H reported that she managed to teach English through songs. A further problem which was encountered by Teacher H was conflict with her school's priorities. Teacher H reported that preparing her students for national examinations had restricted her choice of the materials she used. Teacher H said she was not able to provide English material as she wanted, since she had to focus on materials that would be used in the examination, "I did not feel entirely free in choosing or preparing materials for my class".

Teacher C complained she lacked energy. She indicated that she always felt tired. Besides her busy teaching schedules and administrative duties, she felt overburdened by teaching additional classes which started at 6.45 a.m., an hour earlier than regular classes. Teacher C indicated that she hardly had enough energy to do her AR, "... let alone to think about AR at home".

Teacher E, as another example, had to take care of a family member who was sick. In his situation, Teacher E reported that his constraints in conducting AR were lack of time, energy and the ability to concentrate. To make up for lost research time, Teacher E had many discussions with the facilitators and other colleagues. While his family commitment had created a challenge for his AR study, Teacher E also encountered a further problem from a colleague. Teacher E was discouraged when the colleague criticised his AR study. His colleague was sceptical, "... you are doing the impossible", when seeing Teacher E became

busier in preparing teaching materials and in correcting students' work. However, *Teacher E* indicated that these comments became less disturbing when he realised that his class was improving. Hence, *Teacher E* persisted in continuing his AR study.

4.3.2.6. Teachers' suggestions about overcoming the problems and support they needed

Teachers proposed various solutions in order to minimise difficulties during AR implementation. Table 4.8 summarises suggestions about how teachers could help themselves, the support expected from the schools, and the support expected from the government.

Table 4.8: Teachers' Suggestions and Support Needed

Teachers	Schools	Government
 motivate oneself to write diary prioritise time keep learning and asking get oneself used to AR 	 provide funding provide reference materials provide assistance for AR provide assistance for teacher, e.g.: correcting reduce working load improve teaching facilities establish collaboration with universities entrust teachers to manage their teaching provide conducive atmosphere change orientation: product to process motivate teachers to conduct AR 	 increase teachers' salary change into decentralised system

Teachers suggested that problems in conducting AR could be minimised if teachers were able to motivate themselves, prioritise spare time for writing diaries, and familiarise themselves with AR through on-going learning about this form of research. However, the teachers themselves indicated that carrying out these suggestions would certainly not be easy. Some teachers reported that

sparing time for AR was difficult because of heavy workloads. Some teachers whose children were grown up suggested Tuesday as a day to think about AR, as it was the PD day for the English teachers on which they did not officially teach. However, teachers who had small children were not interested in this suggestion. Teacher B indicated that on Tuesday she felt obliged to, "give more attention to her children", as she was busy on the other days.

As shown in Table 4.8, teachers wanted the schools and the government to support them in conducting AR. The supports included providing research funding, providing reference material, and providing assistance in conducting AR. Among these, teachers indicated that they required continuous assistance to undertake AR considering that it was not familiar to them. *Teacher B* reported that she was interested in continuing AR after the study finished. However, she was concerned about the facilitator's availability as before, "What should I do if I was stuck and you were no longer with us?"

The teachers indicated that they wanted the schools to entrust them with managing their classes. For example, *Teacher B* suggested that the schools should be flexible with the curriculum. She believed, "... the teacher is the manager in the class", and that teachers should have, "...flexibility to choose the teaching techniques in the classroom".

Teacher H suggested the school change its orientation from being a productoriented school into a more process-oriented school. In her opinion, the school was so obsessed by the students' success in the national examination, that she was unable to choose teaching materials and teaching techniques freely.

In order to have a complete picture of AR, Teacher C wanted the principal to take part in conducting AR, "The principals should do AR". From this direct experience, Teacher C anticipated that the principal would have, "... more understanding and support teachers who conducted AR in a more realistic way".

Teacher I suggested the government increases the teachers' salary. Although understandable, this suggestion is, "... probably unrealistic because it relates to the government policy and system" (Researcher's journal). Teacher I argued that, "Having enough salary would prevent teachers from taking up other commitments so that they could concentrate on improving their work performance". It was also suggested that the government could change the education system into a more decentralised system, so teachers would have more freedom to manage their classes.

This section closes the presentation of the second stage of the research framework, the process of teachers' AR. It discusses how teachers engaged themselves in AR, starting with participating in AR workshops and continued with undertaking AR in the classrooms. Relating to the workshops, it could be said that through the workshops, teachers were preparing themselves to learn about the nature of PD and the nature of AR; and to gain skills in conducting AR. Concerning the AR implementation, from their responses it could be said that AR provided teachers with various dimensions of PD activities. These included

the dimension of *place*: that PD could be conducted in the classrooms, teachers' everyday places; the dimension of *time*: that PD could be undertaken at any time and at the same time as they were teaching; the dimension of *approach*: that

teachers could be the subject of research and not just the object as it used to be; the dimension of *hierarchy*: that PD could be initiated from teachers' own needs and came from their own situation; the dimension of *collaboration*: that PD could be established through collaboration which could eliminate academic isolation; and the dimension of *immediate results*: that the outcomes of PD could be harvested directly by the teachers and the students. The discussions also highlighted challenges and impediments encountered by the teachers and the proposed solutions.

The following sections aims to discuss the last stage of the overall framework, the *products of teachers'* AR. It highlights the impacts of AR after the teachers finished conducting the research.

4.4. Products of teachers' action research

This section refers to the last stage of the overall research framework, the product of teachers' AR. It focuses on the activities that were conducted after the teachers finished their research. These include two major activities, the dissemination of the research and the back-to-school study. This section is identified as the product of teachers' AR because it provides a sense of the concrete outcomes of their research. In the research dissemination, they produced

research reports, presented posters, and presented papers for the seminar. The poster presentation and the seminar were held in order to introduce and publicise teachers' AR to other teachers. In addition, the reports and the posters were compiled and distributed to each of the public HSs, the English MGMP, and all the teachers who conducted the research. The dissemination data were taken from interviews; documents, such as the reports, papers, and their posters; and the video recording which was taken during the poster display and the seminar.

The back-to-school study was conducted through questionnaires which were distributed to the teachers and were followed up with in-depth interviews. Since the back-to-school study was designed to investigate the impacts of AR on teaching, the questionnaires and the interviews were conducted two weeks after the teachers returned to new classes.

The discussions of the dissemination of the research and the back-to-school study are presented in sections 4.4.1 and 4.4.2 below.

4.4.1 Dissemination of teachers' research

This section examines the dissemination of the teachers' AR. It focuses on the written reports, posters, and seminar papers which were conducted by the teachers. Dissemination of the research as conducted by the teachers in this study is highly recommended (Burns, 1999), because it provides benefits for the individual teacher who conducted the research and other teachers.

4.4.1.1. Reports

As mentioned before (see Table 4.5), although not all the teachers had finished their research, they were asked to start writing their reports from week 10 of the

AR implementation. The report format which was adapted from Richards and Lockhart (1994) referred to a "simple" (Researcher's journal) description of what was conducted in their research (see Appendix 4.2).

Considering writing constraints experienced by the teachers, I chose this format because it is less complicated than other formats which I knew. In addition, since this is the first time for the teachers do to research, it will be very discouraging and too frightening if they have to write a more formal report. (Researcher's journal)

The research report described the *initial reflection*, which revealed the identification of the research problems, indicators of the problems, and the proposed solution; the total number of *cycles* conducted in the research, which described the stages of planning, action, observation, and reflections; and the *findings* of the research. This format did not require teachers to describe the research techniques, such as data collection and data analysis which were applied in their research. "At this first experience of conducting AR, I consider it not reasonable to ask them to write the research methodology" (Researcher's journal).

Despite the samples and models of the reports, and assistance which were available for the teachers, writing reports emerged as a challenge for the teachers. Beside the contents, they also encountered difficulty to express their ideas in

English. "Obviously, teachers were not used to write academically. In addition to the contents and the style, language became a problem too" (Researcher's journal). Although they were asked to write in English, four teachers asked me to allow them to write the reports in Indonesian. The reason for writing it in Indonesian was as stated by Teacher F, "To think the content is one problem already, and to express it in English is another big problem". Teacher G said that, "It is easier to do it in Indonesian. In English I found it difficult to find the right words so that my writing was very dry".

On the other hand, assisting teachers to write the reports was a real challenge for me. This included assisting teachers who wrote reports in Indonesian too. What $Teacher\ F$ and $Teacher\ G$ said above was reflected in my own experience as indicated in my journal,

The teachers are very "stingy" with their words. Very often one idea is expressed separately without supporting information. I also often find that the teachers did not write complete sentences, only phrases dangling incompletely. It is really exhausting to assist them to finish the reports. (Researcher's journal)

Nevertheless, as the reports developed, all teachers showed their enthusiasm to continue writing. When Teacher C read her report, although it was not completely finished, she said it, "...led me to trace what I did in my research. I then could find things or details which were missing from the report. It was a pity if those details were not mentioned in my report". Other teachers also experienced this feeling. "One evening, Teacher F called me to let me know that she had an idea for her report and asked my opinion about it" (Researcher's journal). The reports finished at the end of week 12. All teachers indicated their

pleasure on completing their reports. Teacher J, for example, perceived the report as a concrete proof of his research, "When I read my report, it convinces me that I actually have conducted research". Teacher E whose colleagues did not response positively to his research project said, "I could hardly wait to show the report to my friends".

As soon the teachers completed the reports, they were asked to prepare their posters and the seminar papers.

4.4.1.2. Poster presentation

The audience who attended the poster presentation and the seminar were HS teachers who taught English, teachers who taught non-English subjects who represented each public HSs in Surakarta, committee members of the English MGMP, and officials of the Ministry of Education from the district level. The HS principals were not able to attend because of an urgent meeting with officials of the Ministry of Education at the provincial level. Among the ten teachers in this study, *Teacher B* was unable to attend.

The poster presentation and the seminar were conducted on the same day to complement each other. The poster presentation, which was run 30 minutes prior to the seminar, provided the audience with information before they engaged themselves in the seminar. The poster presentation and the seminar were conducted in order to introduce and publicise teacher AR to other teachers. In addition, these activities were supposed to encourage and build teachers'

confidence to present their research in an academic forum. Moreover, the poster presentation was also aimed at providing teachers with experience that presenting a piece of research could be a "simple and fun" (Teacher J) activity, "Almost all teachers indicated that academic forums such as seminar, workshops, or training are sophisticated, serious, and not cheap," (Researcher's journal). Compared to the writing activities such as diaries, reports, and seminar papers, all teachers reported that preparing posters was interesting (see the example in Appendix 4.3). They presented their research in "brief, simple, and easy-to-follow ways" (Researcher's journal) such as in the form of diagrams or flow-charts. Teacher J reported his amazement that, "... this simple and interesting activity has professional development value". Although she could not attend the poster display and the seminar, Teacher B who prepared her poster with her children said that it was "fun".

During the posters display, the teachers remained nearby anticipating questions from the audience. Colleague K and I circulated the room and were ready to provide assistance to the teachers and the audience. The teachers reported that each of them had questions from the audience. Teacher G indicated that she did not encounter difficulties in answering questions because, "... they asked about the process and some points in the research as shown in the poster. As I am familiar with my research, it is not difficult to answer their questions". Teacher A reported that a non-English teacher from her HS expressed her envy at this type of PD. Teacher A said, "My friend wished that this kind of activities could also be conducted in her History subject study". One audience member, who

taught Geography approached me and expressed her appreciation, "It is very lucky that English teachers have this kind of opportunity. I can see how important this is for teachers and students" (Audience 1 as written in the researcher's journal). Another audience member who talked with me concluded with her observation of the posters.

From the display and brief talks to the teachers I can say that it is they themselves who did the research. It is very different from other research before. Usually it was we, the teachers who were being researched. (Audience 2 as written in the researcher's journal)

Teacher D reported her delight, "I am proud to see the response from the audience in the poster display. Especially that it is us who do this. To my knowledge this is the first time it has happened in Surakarta".

Overall, the poster display ran well as indicated by the active interaction between the audience and the teachers. After almost an hour of discussion, the audience and the teachers were invited to attend the seminar.

4.4.1.3. Action research seminar

The seminar was organised into three sessions. The first session focused on the topics of AR; the second session focused on the experience of the AR, and the last session highlighted teachers' perceptions about the AR study. The way of organising the sessions into presenting the topics, the teachers' experiences, and the teachers' perceptions was meant to vary the discussion so that seminar was not monotonous. As the poster presentation had already indicated information

about the various projects, it was hoped that the audience already knew the background. Each teacher, except *Teacher B* who was unable to come, spoke in turn. Hence, in each session there were three teachers who presented a paper.

In the first session, Teacher A, Teacher C and Teacher E focused on the topics of the AR study. This session aimed at providing the audience with an overall illustration of the steps of AR and a well developed set of cycles for conducting research. Teacher A, Teacher C and Teacher E highlighted the various of their research, such as the topics that they chose, the class used for AR, the classroom issues they wanted to investigate, the proposed solution, the numbers of cycles conducted in the research (including planning, action, observation, and reflection), and the research findings. "Teacher A, Teacher C and Teacher E did not have difficulties in delivering their papers. Since their session focused on the research itself, they just summarised from their reports" (Researcher's journal).

In the second session, Teacher D, Teacher H and Teacher I presented their experiences of conducting AR. This session aimed at providing illustrations about the individual creative process of undertaking the research. Teacher D, Teacher H and Teacher I focused on the individual journeys which led them to particular decisions at various stages or cycles in their research. For example, Teacher I recounted his journey to come the decision to involve his students to write test items to overcome the low-test achievement in his class. Teacher H told her experience in choosing negotiating her lessons as the solution of her research problem. My journal revealed her presentation as follows.

In her paper Teacher H reported to the audience her individual process of choosing the solution to her class issues about her student's apparent laziness, low participation in the class, and attendance problems. She reported how and why she decided to negotiate her lessons with her students instead of excluding students from planning the lesson as she usually did in her previous teaching. She mentioned that because she was inspired by the "appreciative atmosphere" which she experienced in the AR workshops, she wanted her students to feel the same too. (Researcher's journal)

While Teacher I and Teacher H presented the experiences of their early stage of AR, Teacher D presented her experience in the stage of reflection in a research cycle. This was the stage where Teacher D evaluated the previous processes in her research which enabled her to, "... identify the positive points which developed in my research and identify some developments which needed more attention". In the seminar, Teacher D suggested that, "The reflection stage was crucial in AR since this was the basis to plan further actions in the next cycle".

In the third session, Teacher F, Teacher G and Teacher J presented their perceptions during their AR study. The aim of this session was to provide the audience with illustrations of the teachers' responses to conducting AR. Teacher F, Teacher G and Teacher J focused on the difficulties and the benefits of conducting AR. In addition, they also mentioned how the schools and the government could provide support to facilitate teachers in conducting AR. Teacher G's comments focused on the difficulties and benefits of writing diaries. Teacher J commented about difficulties in formulating and focusing classroom issues for his research, and the benefit of conducting AR. Teacher F recounted that she found it difficult to,

... implement the research as planned in the proposal. In reality, things could be different. For example, my research was conducted in three cycles, although I only planned it for two cycles. There should be continuity between a cycle to the others. And this was not easy since I had to be able to identify the crucial things in one cycle so that I could plan actions for the next cycle. (Teacher F)

However, she also mentioned the benefits of conducting AR.

From one cycle to the other, I found myself gave greater attention to my students. The teaching was not as monotonous as it used to be. I had an urge to help my students more. I spared my time, which was not much actually, to read references about main ideas [see the topic of her research in Table 4.6]. I did so in the hope that I could find more explanation to help my students in understanding main ideas. My hard work was rewarding when I saw improvement in my class. (Teacher F)

Following each session was time for sharing ideas. *Colleague K* and *I* facilitated the discussion. Questions from the audience mostly related to the research topics which were presented in session one. These questions related to solutions about improving or solving problems that the teachers implemented in their AR. Almost none of the audience asked about the process of AR. My journal reveals my reflection on this issue.

The audience's questions represented the level of their comprehension about AR. It would not be possible to expect the audience to ask about the stages in the cycles of AR if they did not comprehend the process of AR. (Researcher's journal)

In answering questions, all the teachers could respond well. When *Teacher E* was asked by a teacher educator in the English MGMP, about using translation in a way not described in the curriculum, *Teacher E* responded that he did that because he considered it could enrich his students' vocabulary and improve their

participation in his class. My journal revealed my impression of *Teacher E*'s confidence,

Teacher E looked very confident in answering the question. He argued that using translation as the pre-reading instead of the post-reading activity was his intentional strategy to give a temporary shock therapy to his students. (Researcher's journal)

After the seminar, the teachers indicated that they felt relieved because they had finished what *Teacher F* referred as the "big job" of speaking in front of an audience and presenting a paper. Prior to the seminar, however, although the materials could be retrieved from their research reports and diaries, all teachers indicated their anxieties because they were aware that they were to talk and present the papers in front of an audience. *Teacher H* said, "This will be my first time to speak in a seminar". Teacher F needed to phone me the night before, for reassurance about what she wanted to present, "Only remembering that the principals would be there and I have to speak in front of them could make me sweating".

Concerning the experience of speaking in the seminar, Teacher J said, "It was like heart gymnastics". Some teachers also reported that they were not confident to handle the questions from the audience. However, Teacher G reported that she was not really worried because she relied on the facilitators to assist her if she had to answer difficult questions, "I would certainly throw the question back to you (Colleague K and I)". Teacher A, on the other hand, said that she should not have been that worried, "I overestimated", because after the seminar she then

realised that the questions from the audience were about sharing ideas. Teacher A said, "I think the audience were really asking me, and were not testing me".

This section focused on the teachers' experiences and responses to speaking and delivering a paper in a seminar. It revealed that this was a first time experience for all teachers. This section also closes the discussion about the dissemination of the teachers' AR which included writing reports, preparing and displaying posters, and delivering a paper in the seminar. The next section focuses on the second part of the products of the teachers' AR, namely the back-to-school study.

4.4.2. Back-to-school study

This section investigates the impact of AR on teachers after the implementation phase. The back-to-school study aimed to investigate the effects of AR on teaching, and whether or not the teachers continued engaging in AR. The teachers completed a questionnaire that was adapted from Nunan (1992b). The questionnaire (see Appendix 3.3) was distributed after the second week of their teaching in the new term. In order to obtain more detailed data, the questionnaire was followed by in-depth interviews. The findings are organised into two major aspects comprising the impact of AR on teaching, and the possibilities of continuing AR in new classes. These aspects are discussed in sections 4.4.2.1, and 4.4.2.2.

As part of the study on the impacts of AR on teaching, teachers were asked about their perceptions of the objectives of conducting AR; and about their perceptions of how their practices changed after participation in AR. To investigate teachers' perceptions of the objectives of conducting AR, they were asked to complete a statement, "Action research is carried out in order to ...". In response to this statement, five teachers related the objectives of AR to improvement of teaching practice and students' achievement. Teacher C, for example stated that AR was carried out in order, "... to improve the teacher's ability in teaching which in turn could increase students' achievement"; and Teacher B said that AR was conducted to, "... improve the quality of teaching and learning".

Five other teachers reported that AR was conducted in order to find and overcome problems in classroom practices. Teacher J, for example said that AR was carried out in order to, "... find problems through self-reflective inquiry in order to overcome the problems and to optimise the classroom potentials".

Teacher F and Teacher G agreed that AR was conducted in order to, "... find the most suitable and the most effective teaching techniques".

To investigate teachers' perceptions of how their practices changed after participation in AR, they were asked to complete a table. The aspects they noted and to what extent these aspects changed are summarised in Table 4.9.

Table 4.9: Teachers' Perceptions about what Changed in their Practices after Action Research

After conducting AR, teachers felt that when				
they taught they	less	same	more	
tried to use a greater variety of behaviours		1	9	
praised students		1	9	
criticised students	10			
were aware of students' feelings		2	8	
were conscious of their nonviable communication		2	8	
used the target language in class		_3	7_	
were conscious of nonviable cues of students		2	8	
tried to encourage students to express ideas		2	8	
tried to incorporate student ideas into their teaching		3	7	
spent more class time talking themselves	8	2		
tried to get their students working in groups		1	9	
tried to get divergent, open-ended student responses		l	9	
tried to get students to participate			10	
tried to establish good atmosphere in the class			10	

Adapted from Nunan (1992b: 8)

As shown in Table 4.9 all the teachers indicated that they changed the way they related to students, such as increasing their praise and reducing their criticism of students. *Teacher E*, for example, who used to believe that most students did not like him, reported "a giant leap" happened in the process of his research as the situation in his classroom became more "fluid" in which he was able to "get along better" with his students. He indicated that the situation was different from the one before where he often criticised his students,

"I feel guilt as I compensated my frustration to my students. I saw them from negative side, as I never gave encouragement or nice words. I was not friendly and often gave bad remarks to my students. My hobby of practising karate even made my reputation worse because I believed they did not dare to complain about me frankly".

Teacher E reported he underwent "rejuvenation" when he realised he was able to "transform myself into a better teacher". His class was reported as "enjoyable

and relaxing", and he said, "I believe my students and I are able to build trust in the classroom. I am a happy teacher now and I guess my students too". More detailed illustrations of improvement in Teacher E 's class are described in section 5.4.

It is a common practice in the Indonesian culture that teachers tend to being more dominant, even when a student-centred approach is being adopted in the teaching. In the classroom teachers tend to taking bigger portion of talking than the students. However, all teachers in this study reported that they had a tendency to reduce time talking about them. Teacher G, as an example reported that she, "... restrained myself from talking too much which was unimportant and irrelevant to the lesson". Teacher B who said that she was a, "talkative teacher" reported she began to, "... enjoy listening to students practising and using the [English] language. After all it's the students who need more practice, not me".

Another aspect teachers noted changed is that they increased their awareness of their non-verbal clues and became more aware of their students' feelings. Teacher H, for example, reported that when she negotiated her lesson with her students during her research, she gained more sensitivity towards students' needs. Teacher H said, "Now it is not only a matter of how I teach but also how my students learn". Teacher H reported that being able to fulfil students' needs through negotiation was challenging and inspiring. Besides the positive impacts observed in her students, Teacher H indicated that this strategy increased her self-esteem as well. Teacher H reported that she felt good about herself because,

"... involving my students in planning the lesson meant I humanised them, not treated them as objects. I think I did a good thing".

Likewise, Teacher G felt that she became more expert in identifying her students' non-verbal responses to her teaching, "Being able to recognise that my students were getting bored helped me to modify and adjust the techniques and materials I used in the lessons". Teacher G said that she benefited from this skill because it, "... was very important to maintain a positive atmosphere in my class".

Some teachers reported that they deliberately sent assurance gestures to their students like nodding, smiling, and giving friendly signs when they taught. Teacher J who portrayed himself as an angry teacher, " ... students were frightened of me", reported that he always reminded himself to smile more often and to be more patient with his students. Teacher J indicated that he found it enlightening to be able to do so, "I don't believe myself that I treat better to my students".

4.4.2.2. After action research: what's next?

When asked whether the teachers were continuing to use an AR approach, their answers indicated three responses. Figure 4.4 illustrates the teachers' responses. Five teachers reported they were continuing an AR approach; two teachers were not; and three other teachers reported *yes/no* responses to whether they continued

the AR approach in their new classes (the *yes/no* responses are further explained below).

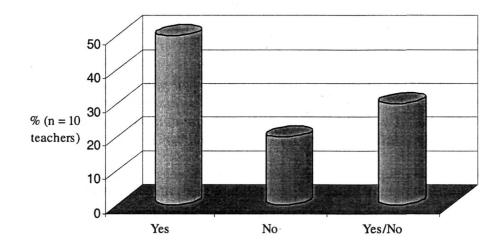


Figure 4.4 Teachers Implementing Action Research in New Classes

Teachers who continued to apply AR indicated that it assisted them in identifying areas that needed improvement. *Teacher G* commented,

I realised the importance of doing AR. It encouraged me to always do self-reflection and recognised areas to improve in my teaching so that I have to find out better ideas and better techniques for my class. (Teacher G)

As Teacher G was, "happy with the result of my teaching in the AR study", and thought that, "AR brought a contented feeling since I knew that I had tried better in my teaching", she indicated that she would continue applying the AR approach. Teacher E stated that he voluntarily continued applying an AR approach because he had better choices in his teaching,

...to improve the teaching and learning process, improve the atmosphere in the class, and be able to know more about the student's potency. The AR approach enabled me to have lots of choice in teaching which was good for me and for my students to prevent them from easily getting bored. (Teacher E)

Meanwhile, although *Teacher A* and *Teacher D* also applied the AR approach in their new classes, they anticipated that the procedures would not be as thorough as in their previous study. *Teacher A* reported that she was pessimistic about completing the whole process of AR, as it,

...would not be as good as when I did it with you. I probably would be able to complete one cycle. But I am not sure with the next cycles. It would all depend on the situation developed at school and particularly in my classroom. (Teacher A)

However, Teacher A hoped that, "... if everything was alright, I would certainly continue my AR and complete the whole cycles which would be needed in my class".

Teacher D stated that her constraint in applying the AR approach was a lack of time in diary writing,

The diary writing was not as good as with when I was with you. I did not write the diary in a special book, but in a logbook provided by the school where I used to write my teaching roster and the progress report. I just wrote whatever crossed in my mind during the writing at school. So if I actually had something in my mind on my way back home, or during cooking, I did not put it in the diary. Just did not have time to do that. (Teacher D)

Teacher H indicated that in applying the AR approach she not as systematic, "I apply the AR in my new class, but it was not as systematic as before". In addition she reported that she did not apply the approach in all classes she taught,

...it was impossible to conduct AR as rigidly as with you. In one week I taught 10 classes. I noticed that every class had potential problems to investigate through AR. Yet, I definitely could not do AR in the whole classes. I could only choose one class to implement AR. But I was worried that other classes might get envious. (Teacher H)

However, Teacher H reported that she maintained the diary writing, "I still kept writing the diary", because this, "...helped me to be more focused in teaching".

As illustrated in Figure 4.4, two teachers did not apply the AR approach. To Teacher C it was because AR "...was not compulsory in my HS". Nevertheless, Teacher C indicated her positive perception of AR that it was very beneficial for teachers, "Teachers should conduct AR". Teacher F indicated that she was reluctant to continue using the AR approach because of the overwhelming number of materials in her class, "I have to cover so many materials for such a limited time".

Figure 4.4 also shows that there were three teachers who indicated yes/no responses. By this the teachers meant that they applied an AR approach mentally without materialising the process and the reflection in written form and in their diaries. Teacher I, for example, reported that the main constraint for him was time, "At home I spend my time for my family". However, Teacher I indicated that he had internalised an AR approach as he said, "...but beyond my head I followed AR procedures in my teaching". Teacher J reported that during the first two weeks of teaching he did not record the teaching process well, "not as systematic as when I did it with you", as he only jotted down aspects of teaching in what he called "unorganised notes". However Teacher J argued that he did apply the approach, "... but I did AR in my class". Teacher B indicated that what she presented in her teaching was in line with AR procedures. After participating in the study she indicated that she had long been conducting an AR approach in her teaching as expressed in following comments.

The stages of planning, action, monitoring, and reflection were actually not strange to me. I have been doing these but I did not know that it was an AR approach and did not do it systematically and record in the written form. (Teacher B)

The difference during the study was that she conducted those processes 'intentionally" (Teacher B). However, like Teacher I and Teacher J, she did not record the process in written form, as she also lacked time.

The discussion about the back-to-school study has revealed the impacts of AR on teaching. It also described the extent of the continuity of adopting the AR approach in the teachers' classes. Although all teachers had positive perceptions to AR, not all of them could adopt the AR approach because of various factors. This section closes the overall discussions of the research framework comprising the inputs of teachers' AR, the processes of teachers' AR, and the products of teachers' AR. The summary of the whole chapter is presented in the following section.

4.5. Summary

This chapter has presented the finding of the teachers' AR study which were described in a framework of three main stages the inputs, the processes, and the products of teachers' AR. These sections illustrated the teachers' perception about PD and AR before conducting AR, how they gained knowledge and skills in AR, how they conducted AR in their classrooms, how the teachers introduced their research into other teachers, and how AR affected their teaching. Included in the description were the teachers' perceptions about the positive aspects

gained during the study for both themselves and for their students. This chapter has also illustrated the constraints encountered by the teachers and their suggestions for overcoming the constraints.

The following chapter, Chapter Five, provides case studies of conducting AR in this study. The chapter aims to illustrate in more depth how four teachers carried out the individual journey of conducting AR. These four individual experiences explore the reality and challenges of conducting AR from an individual point of view. This chapter aims to provide illustration how each teacher responded to the experience, and how AR affected each teacher individually.

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