Chapter One
Introduction

1.1.Introduction

In their daily routines, teachers involve themselves in challenging and unpredicted situations arising from students, parents, curriculum implementation, and their personal problems. By nature teachers should be active persons who investigate issues, gather information, and collect data from their classroom in order to obtain effective answers to their problems. Ideally, problems and questions which arise from within classrooms are solved and answered from within the classroom by the teachers themselves who are familiar with the problems. However, in the Indonesian context teachers are hardly able to do so. A general trend of teacher professional development (PD) in Indonesia uses a top-down approach in which teachers, as the participants are not involved in the design and preparation. Participation in PD programs depends on the availability of the programs and the rotation in schools. So, besides lack of opportunity, the continuity of PD opportunity from one program to another to develop knowledge cannot be guaranteed. This common top-down approach of PD, typical big size classrooms, and heavy workload restrain teachers from initiating PD activities from themselves. In this framework, it is not unusual for teachers to implement solutions offered by outsiders to overcome problems they encountered in the classroom. For this reason, the teachers cannot expect to have significant improvement in the teaching and learning process and there is a tendency that the problems that they usually have still remain.

The notion of the teacher as a researcher, in particular through action research (AR), which is being increasingly adopted into teacher routines and PD in several countries has the potential to respond to the problems above. As mentioned in much of the AR literature, this kind of research allows teachers to examine critically their practice, and formulate problems and at the same time find their solutions. In particular, the teacher AR movement, as defined by Elliot (1991: 69) is *"concerned with the everyday practical problems experienced by teachers, rather than the theoretical problems defined by pure researchers within a discipline of knowledge"*. AR is different from other kind of educational research. Richards and Nunan (1990: 63) suggest that,

> *AR is not simply research grafted onto practice. Rather, it represents a particular attitude on the part of the practitioner, an attitude in which the practitioner is engaged in critical reflection on ideas, the informed application and experimentation of ideas in practice, and the critical evaluation of the outcomes of such application.*

This study was conducted in order to investigate the influence of AR as a significant PD strategy for teachers' growth in the Indonesia context. It was anticipated that the benefits of AR which are reported in the AR literature as rejuvenating teachers' roles would also occur in the case of the ten teachers of this study. In a broader perspective, it was hoped that the study would contribute positive insights in relation to models of AR that would be appropriate for the Indonesian context and would also provide further knowledge about how language teachers respond to AR more generally.

1.2. Background of the study

To discuss the background of the study, a brief theoretical overview depicting teacher PD in the Indonesian context is given, and a contextual background illustrating the implementation of AR in the teacher education faculty where I work is presented. In addition, this section also discusses the necessity for a teacher educator to undertake a self-study. These discussions are presented in sections 1.2.1., 1.2.2., and 1.2.3.

1.2.1. Theoretical background

AR is relatively new in Indonesia as it was officially introduced in Indonesia in 1995 through the Pendidikan Guru Sekolah Menengah Project (education of high school teachers), known as the PGSM Project (Abimanyu, 1998). This project was aimed to improve high school (HS) teacher quality through their involvement in AR. This section depicts briefly the situation of Indonesian teachers in relation to challenges and opportunities to improve their PD and AR as an option to promote teachers PD.

As described in much of the education literature, teachers play an important role in the success of teaching and learning. However, this role is a double-sided coin, as teachers may also be blamed in the case of failure in education. Teachers' quality and competence are regarded as the significant factor in education. Failure in education is closely related to deficiency on the part of teachers (Altrichter, Posch, & Somekh, 1993). Under this framework, various attempts

have been made to improve teachers' proficiency (Surachmad, 2000). However, there is little evidence that these attempts have been evaluated through systematic inquiry to reveal their effectiveness (Supriadi & Hoogenboom, 2003).

While teachers need to undertake PD activities is inevitable, there are institutional and individual challenges which hinder them from pursuing their PD. Supriadi and Hoogenboom (2003) state that some of the major issues relating to teachers in Indonesia concern with: 1) the quality improvement of teacher education, 2) the total number of years taken to complete the education, 3) the number of providers who are eligible to run teacher education, 4) the curriculum development and implementation, and 5) the improvement of teachers' well being. At schools, common challenges are large size classes, heavy workloads and problems of isolation (Crookes, 1997; Wallace, 1998). Crookes (1997) argues that physical arrangements at schools and tight schedules hinder teachers from interacting with each other. Teachers mainly interact with their students and they can become so preoccupied with current routines that larger issues and professional concerns are either not addressed or passed over with little depth in consideration (Lie, 1996). In addition, the remuneration system is often so low that, *"teachers are obliged to take second jobs to make ends meet and cannot afford any time on professional development activities"* (Crookes, 1997: 2). While the factors described above hinder teachers from undertaking PD activities, the situation worsens by the fact that the availability of PD activities themselves depends highly on the providers, such as government, schools, universities, and other institutions.

Given that outside bodies are often in an unfavourable position to support teacher PD in Indonesia, AR within schools may be one solution to ongoing professional growth. AR potentially offers a positive option for PD since the reflective aspect of AR leads teachers to actively criticise their previous experience and to perform better in future practice (Altrichter et al., 1993; Burns, 1999; Nunan, 2001; Tinker-Sachs, 2002). Altrichter et al. (1993: 6) state that AR is conducted by,

> *... teachers who take professional responsibility for what goes on there... Action research starts from practical questions arising from everyday educational work. ... Methods are tailored to what is achievable without overly disrupting practice.*

Therefore, AR potentially enables teachers to undertake PD without sacrificing their teaching because AR can be interwoven during teaching. Additionally, as AR is initiated by teachers themselves to address problems encountered in their practices, it helps them to improve professionally without dependence on other PD providers.

Brindley (1992: 90), suggests that there are three types of research in language education, comprising *"basic"* research, *"applied"* research, and AR. Relating these three types of research to PD, basic research has an indirect relationship because it aims to contribute to basic knowledge, and/or testing theory; applied research may have direct relationship to PD if it is conducted by teachers themselves; and AR has the closest relationship to PD because it aims to *"support teachers, and groups of teachers, in coping with challenges and problems of practice and carrying through innovations in a reflective way"*

(Altrichter, Posch, & Somekh, 1993: 4). With its dynamic process of four significant *"moments"* (Kemmis & McTaggart, 1988) of planning, action, observation, and reflection, AR enables teachers to be more reflective in order to improve their teaching (McNiff, 1992). AR, as mentioned by Mingucci (1999, 1), offers,

> *practitioners a means to unite theory and practice which requires teachers to explore, test, and improve their classroom practice; empowering all members of an organisation through continuous learning; personal mastery, and active participation in the decision-making process.*

Concerning its processes and procedures, AR is often regarded as difficult and messy (Nunan, 1992b; Patterson & Shannon, 1993). Nevertheless, the benefits, as reported in much of the AR literature outweighed challenges that teachers underwent during their research. Glanz (1999: 7) compares AR process to driving a car in his aim to illustrate that AR, *"is not complicated"* as in the following.

> *Equipped with technical knowledge and requisite skills, ... can easily apply research methodology to almost any situation or problem area. Admittedly, there are areas of research and specific research strategies that are very sophisticated and require advanced knowledge. But, aren't there aspects of your automobile's operation that are beyond your comprehension? When was the last time you were able to dismantle a carburettor or replace your transmission? Yet, you still can drive a car! So, too, in this case. Understanding how a particular statistic, for instance, is able to consider disparate test scores from two groups and treat them comparably is immaterial as long as you know that it is the correct procedure to use. Anyone can use research without having to understand the minutiae or intricacies of advanced mathematical calculations. ... is capable of readily applying sound research strategies to solve real problems. Don't avoid research simply because it seems complicated. Action research is an invaluable asset that will not only lead to school wide improvement but will enhance your professional practice.*

The illustration above suggests that AR can be conducted by any teachers who want to improve and to make change in their practice. After all, Miller & Pine (1990: 33) suggest that, *"Action research is not the exclusive territory of those with technical and methodological expertise. Rather, this mode of research is suited to teachers who cultivate a thoughtful, analytic habit of mind"*. Similarly, Altrichter et al. (1993: 5) believe that, *"These teachers are 'normal' teachers, who reflect on their practice to strengthen and develop its positive features"*.

Hence, although AR is new in the Indonesian context, I held a positive attitude to undertaking this study, in which I collaboratively worked with ten HS English teachers who conducted AR in their classes. The quest to investigate the effectiveness of AR as a PD tool in the Indonesian context was conducted in the hope that the findings would contribute to the improvement of teacher quality.

The following section presents the background and context of the teacher education situation in which I teach and which inspired and encouraged me to carry out this study.

1.2.2. Contextual background

From time to time the Indonesian government makes attempts to improve teacher's quality in Indonesia. Relating to teacher qualification, the requirement for level of education has increased. For example, HS teachers used to be those who held a diploma certificate. Currently, however, HS teachers need to hold undergraduate studies (Supriadi, 2003). This policy was implemented not only

for the recruitment of new teachers, but also for older teachers. Support from the government was given to older teachers through scholarships to undertake undergraduate studies. However, since the scholarships were limited, teachers were also encouraged to obtain higher study by themselves.

To respond to this policy, universities that run teacher education programs open extension programs. The English Department of the Faculty of Teacher Training and Education of Sebelas Maret University in Surakarta Indonesia, where I work, runs this program. Besides the regular pre-service program which prepares students to be English teachers, the English Department also runs an extension program where English teachers from junior and senior HSs pursue their higher education. The students in the extension program (student teachers or STs) have already obtained diploma degrees and expected to gain undergraduate degrees in four semesters. In this extension class, I noticed that the teachers were eager to share their problems and to find solutions from the discussion in the class. In the *Teaching Methodology* course, the classes were usually alive because I encouraged them to use real cases from the STs' practice. The STs showed their enthusiasm especially when we discussed techniques that they applied in their classes including their strengths and weaknesses and the constraints they encountered in applying the techniques of teaching. On some occasions I received feedback from STs that they benefited from this discussion; obtained new ideas which could be applied in their teaching; and developed a hopeful feeling that they were not alone in having problems. On reflection, I realised that in their teaching STs experienced problems; that they needed help to solve their

problems but they usually did not know where to seek that help. When they identified sources of help, they were very appreciative and enthusiastic to spend extra hours in discussion, attend extra classes, and investigate more evidence to support their teaching problems.

In 1995 an AR project was launched in Indonesia through the PGSM Project. It was aimed to increase teacher quality through conducting AR. I received research funds to work together with teachers from junior HS to conduct an AR study in their schools. Together with three colleagues, I supervised four English teachers who undertook AR in their classrooms for about eight months. In their research these teachers implemented the principles of AR: inquiring and improving their teaching through stages or cycles of planning, acting, observing and reflecting. During the period of the research I observed that the teachers became more and more confident in many ways. These included expressing problems, sharing ideas, sharing solutions, deciding what to do when something unexpected happened, planning and modifying lessons, and identifying and criticising their teaching. Despite constraints and limitations, both the teachers and the researchers benefited from the project. From the teachers' point of view, they became more motivated about preparing lessons and teaching in class since they were more aware of what and how to deal with their problems, and more open to share and discuss with their colleagues (Rochsantiningsih, Nurkamto, Suparno, & Suyitno, 1998). On the other hand, as university staff we found this approach was a very good way to communicate and collaborate with teachers. We became more aware of the real problems in classrooms. This awareness

helped the English Department prepare English teachers better, especially in increasing awareness of the strengths of reflective practice and its position in teacher education program. After finishing the project, we maintained good communication with the schoolteachers by offering them informal help in the form of discussions, appropriate supporting references and teaching materials, and ideas for planning lessons.

The exciting atmosphere of AR affected the Faculty policy on the students' final assignment in the extension program. From 1997 AR was adopted as the main approach for the final assignment in the extension program. As a requirement of their undergraduate degree, STs now undertake AR based on issues existing in their classrooms. To prepare the STs with AR skills, the English Department decided that an AR approach should be taught in the *Research Methodology* class. In addition, as AR was relatively new in Indonesia, we also conducted seminars and workshops on AR for the lecturers in the Faculty. We received encouraging input from STs as they became more focused on what to do with their research. Since most STs had been teaching for some time, AR approach was reported directly touched their problems in the classroom. They felt they had more authority since they were familiar with the problems and (with supervision from the lecturers) knew how to solve the problems. One female ST told me that *"I became more like a captain in my own ship" (ST A)*, which meant she had more authority to lead and to direct her ship where to go.

This feedback was positive since there was an atmosphere of empowerment from the STs' point of view. Nevertheless, improvement and support were needed, at

least in two areas. Firstly, STs needed to improve their knowledge of the nature on AR, and to improve methodology skills especially those which related to AR. Secondly, in conducting their research STs also needed support which included references; collaboration with colleagues; supervisors; a constructive and supportive atmosphere in their schools; financial and equipment support; and enough time to write diaries/journals and to reflect. I was also interested to find out whether they used AR in their own practice after finishing their study. This concern increased when one or two STs who had finished their study told me that although AR was fascinating and challenging, they encountered many obstacles once they were back at their schools. For example, *ST B* needed support from her colleagues and the school for the implementation of AR, *"I wish there were other teachers in my school who knew AR, so that I do not feel alone"*. This was evidence that it required strong school supports to implement AR successfully. Since AR is a new trend of PD in Indonesia, it was not easy for teachers to find support. However, I believed that if the principals and other school staff realised the advantages of AR for teacher's growth and school improvement, they would became more positive about this approach.

On January 2001 Indonesia started to implement the newly legalised policy of *autonomy in education*. Traditionally teacher development has been conducted through brief in-service training that provided teachers with new methods and techniques to be implemented in their practice. This could be regarded as a "top-down" approach to teacher education. With this new policy of *autonomy in education*, it is anticipated that teacher development will have a different flavour.

The education system will not be as centralised, and in turn teachers will have more responsibility which will increase their involvement in the educational decision-making process including their personal PD. To anticipate these new roles, teachers will need to be able to recognise their PD needs by *"constantly questioning, reflecting upon, and looking for ways to improve their instructional practices"* (Mingucci, 1999: 1). Similarly, Altrichter et al. (1993: 5-6) suggest that to anticipate the current rapid social change, teachers need to individually and collaboratively,

> *reflect upon their practice, analyse the functioning of their institution and its strengths and weaknesses, develop perspectives for futures, translate them into actions and structures, and monitor their impact on real situations.*

AR is an approach that is relevant to the idea of autonomy, since the reflective practice in AR *"is a powerful means through which teachers transform their beliefs and practices"* (Newman, 1998: xi). Schön (1983) stresses that this sort of research helps practitioners to enter into a way of seeing, restructuring, and intervening which they may wish to make their own. In line with this, Richert (1990: 525) highlights that,

> *The ability to think about what one does and why - assessing past actions, current situations, and intended outcomes - is vital to intelligent practice, practice that is reflective rather than routine. As the time in the teaching process when teachers stop to think about their work and make sense of it, reflection influences how one grows as a professional by influencing how successfully one is able to learn from one's experiences.*

The popularity of AR in teacher education as an effective research process which promotes teacher skills of inquiry, reflection, problem solving, action, change,

and improvement attracted me as a teacher educator (TE) and a university-based facilitator to undertake further study of AR collaboratively with teachers in the Indonesian context. This is one of the reasons which motivated me to undertake this study. The following section presents another motivation which relates to self-study for TEs.

1.2.3. Self-study for teacher educators

There is increasing interest in self-study of teacher education practices conducted by teacher educators. Self-study has to do with Schön's (1983) ideas about reflection on practice which was further developed by Mundy and Russell (1994) through their idea of authority of experience *"as a key to knowledge and understanding of teaching and learning"* (Northfield & Loughran, 1996: 1). Teachers who teach teachers, also known as TEs, like other teachers in general, need to keep updating their PD. Under this belief, Cole and Knowles (1995) insist that being a TE is a lifelong process of ongoing development rooted in the individual; and that TE's PD is facilitated by taking chances for continuing reflection on and inquiry into wide range of experiences that affect professional lives and careers. Within this framework, Cole and Knowles (1995) emphasis the importance of prior and current personal experience which shape the growth of PD. They claim that a TE engaged in self-study through the exploration of personal history is said to gain similar benefits as other teachers have from reflective practice of their practice, as expressed in the following:

> *Ongoing reflexive examination of professional practice challenges thinking about teaching and teacher education, and*

> *raises awareness of curricula and pedagogical decision-making. ... Reflexive inquiry facilitates understanding and articulation of the links between initial and formal teacher education and the career-long professional development of classroom teachers and university teacher educators. (Cole and Knowles, 1995: 148)*

Self-study has two main purposes: for personal PD, and for enhancing understanding of teacher education practices, processes, programs and context (Cole & Knowles, 1998). Although both purposes refer to refining, reforming, and re-articulating teacher education, the former which is often more practical and self-oriented aims to the ongoing development of one's own pedagogical practice. The latter aims to the *"production and advancement of knowledge about teacher education practices and the programs and contexts within which they are situated"* (Cole & Knowles, 1998: 42). However, it does not mean that one purpose is always obvious in one self-study. Sometimes, both purposes may appear at the same time.

In my case, I consider my self-study relates more to the second purpose. I am concerned with the effect of an AR course that I taught in my students' teaching life. Although I received positive feedback from students who took AR courses, I also noticed constraints that hindered them from adopting AR in their practice. By reflecting on my own practice, I am trying to understand my teaching situation for which I have to prepare and support teachers to understand and undertake AR. In trying to better clarify the problem, I came to the points of questioning 1) teachers' perception of AR as a learning process; 2) the kinds of support structures or information teachers need as they undertake AR; 3) my role in facilitating factors/support needed by teacher as they undertake AR; and 4) my

role in relation to strategies I could offer to encourage teachers to conduct AR. In the process of answering these questions I hope to gain understanding of my teaching experience, as claimed by Loughran and Northfield (1988), that self-study is concerned with the development of knowledge through better understanding of personal experience.

I anticipated that this study would allow me to build more understanding of AR as knowledge and as a research process; obtain insights into the realities of AR when it is conducted by teachers; and develop and improve my research skills. These benefits will be significant in developing and improving my approaches and strategies in facilitating teachers; and improving my AR teaching, not only theoretically but also in terms of supporting my teaching practically with evidence from real research.

1.3. Research questions

This study investigates the perceptions of ten teachers in relation to whether, and to what extent their engagement in AR enhances their PD. This study describes the realities that occurred when these teachers conducted AR. It records their perceptions and responses towards AR and the impacts of AR in their teaching. The investigation in the study aims to answer the following questions:

1. How and in what ways do teachers perceive that their involvement in AR enhances their PD?
2. How and in what ways do teachers perceive that their involvement in AR affects their practice?
3. How and in what ways do teachers perceive that their involvement in AR influences their students' learning?

4. Do teachers experience difficulties in conducting AR. If so, how do they consider these difficulties might be overcome?
5. What kinds of support structures do teachers need as they undertake AR?

1.4. Significance of the research

While in the general educational literature (Altrichter et al., 1993; McNiff, 1992) and in the growing English language teaching (ELT) literature (Burns, 1999; Edge, 2001; Freeman & Johnson, 1998; Richards & Ho, 1998; Tinker-Sachs, 2002; Wallace, 1998) there is evidence of the significance of AR in promoting teacher PD, in Indonesia AR is relatively new. An extensive exploration into the literature reveals that discussions and studies of teachers' PD have mostly been in western contexts. There is very little research available on teacher PD in the Indonesian context, and even less focusing on AR. Researchers establishing collaboration with teachers in AR for their PD is also relatively new in Indonesia. Given this situation, this study aims to contribute to the knowledge base on developing teacher PD through AR, particularly in the Indonesian context. Teachers, principals, and TEs may gain from the findings related to teacher PD developed in this study. In addition, the study aims to provide a basis for further research in this area.

As this study asks teachers to undertake AR which engaged them in reflective thinking, it aims to help teachers to gain a better understanding of observing themselves in practice; and inquiring of themselves critically in order to improve their practice within particular teaching and learning situations. This study will

help teachers to understand how AR influences the processes of teaching and learning.

As part of the study, the teachers who participated in this research were invited to a series of workshop. These were conducted in order to arm teachers with AR knowledge, to improve their research skills, and to plan their AR topics and proposed solutions. In addition, the workshops also aimed to develop a strong commitment on the part of the teachers to conduct AR on their teaching practices. Hence, this study expects to provide a model of AR workshops and processes suitable in the Indonesian context, which will be able to offer sufficient knowledge, skills, and commitment for teachers to undertake AR.

After finishing their participation in the workshops, the teachers conducted AR in their classrooms for one term. During this implementation, the teachers received assistance through regular weekly interviews, individual assistance, and group discussions. In their research, the teachers also completed reports, prepared posters, and delivered a paper for a seminar. This study expects to provide a model of AR, including its dissemination, as a means of enhancing PD which is transferable to other Indonesian HSs and different contexts.

From the researcher's point of view, as one who also works as a university-base TE, this study provided ample opportunities to improve my professional practice, especially in teaching AR to teachers; to broaden my horizon on conducting AR; and to develop skills of supporting and assisting teachers who undertook AR.

This study, then, will be significant for other TEs who work in the same environment and have similar responsibilities as facilitators.

1.5. Scope of the study

The ultimate goal of this study is to investigate the perceptions of ten HS English teachers about their involvement in AR toward their PD. To frame this goal, a theoretical discussion concerning teacher PD and AR is presented. For this purpose, a review of related literature of teacher PD is conducted to identify the current trend of teacher PD. A review of related literature of the nature of AR, its history, its processes, and its impacts on PD is also discussed. In addition, as English is a foreign language in Indonesia, it is essential to review related literature of teaching English as a foreign language (TEFL). This review is presented in Chapter two.

Besides the theoretical framework above, this study also underwent empirical processes through two major activities: a series of AR workshops, and the implementation of AR in the teacher classrooms. The workshops were considered important to run because AR was a new trend of PD in the Indonesian context. Hence, these workshops aimed to broaden teachers' horizons about a current trend of PD which was quite different from PD activities that they had experienced before. Additionally, the workshops also aimed at introducing the teachers to the nature of AR, and improving their research skills. Finishing the workshops, the teachers were expected to produce research proposals which would be implemented in the classrooms through their AR projects. To

materialise these aims, this study designed workshop kits focusing on materials presented in the workshops, activities for the teachers, and strategies to support and facilitate the teachers.

The research preparation through the workshops above was then implemented by the teachers in their classes for one school term. Teachers' participation in the workshops and their engagement in their research projects provided them with real research experience. These included the struggles they encountered in focusing research, implementing their research proposal in a real situation, facing problems in most stages of their AR projects, expressing ideas in diary writing, preparing a paper for the seminar, and focusing themselves for the commitment to complete their research. The research experience also provided them with the excitements of positive developments which occurred in their research, such as the improvement in their classes, the joy of sharing ideas in the group discussion among these teachers, and the relief of completing their research, producing reports, and delivering their research in a seminar.

At various levels, both the teachers and I were able to re-evaluate empirically our research questions in a natural situation for development purposes. Through the process of their AR projects, the teachers collaboratively with me evaluated and modified their research through individual interviews, and group discussion. On the other hand, in my case as the researcher and the facilitator, this study provided me with authentic data of AR conducted by HS teachers. The data gathered from the evaluation was used to develop the next research plan in the study. In brief, in seeking the answers to the research objectives, this study was

conducted through the engagement of teachers in AR projects. Through such a process, a theoretically and empirically oriented implementation of teacher AR, the effectiveness of AR within teacher PD was investigated

1.6. Organisation of the thesis

The organisation of the thesis, which consists of six chapters, is as follows. Chapter one describes the background of the study. It shows that in the Indonesian context, AR offers a potential alternative for ELT teacher PD. To justify this study, this chapter also outlines the significance of the research. In chapter two, the literature is surveyed in order to present the major theories that support this study and to provide a conceptual framework for the research. It includes a discussion of the current trends in PD, an identification of effective PD, the general nature of AR, a brief history of AR, and the relation of AR to teacher PD.

The research methods used in the study are outlined in chapter three. The discussion provides further information about the specific context of the study, profiles of the ten HS English teachers who participated in this study, details the data collection procedures, and describes the data analysis procedures.

The findings of the study are presented in two chapters, chapter four and chapter five. Chapter four focuses on the general findings of the study. How AR benefited teaching, and what problems were encountered by the teachers are presented. The findings are organised into three major sections that are the

overall framework for the findings. These include the inputs, the processes, and the products of teachers' AR. Chapter five sets out case studies of four of the teachers. These case studies allow for a more complete picture of the realities of action research from the individual teacher's point of view. Chapter six summarises the research findings and concludes the study. It discusses broader implications of the research and makes suggestions for further research, particularly in the Indonesian context.

Chapter Two
Literature Review

The aim of this chapter is to present an overview of literature in order to provide a working definition of the roles of English in the Indonesian context, PD, and AR in the context of teachers' PD. This chapter is an essential part in conducting research since reviewing literature provides, *"background information on the research question, and to identify what others have said and/or discovered about the question"* (Nunan, 1992a: 216). The focus of the chapter is on reviewing the literature on teaching English as a foreign language; on PD; and on AR including the nature of AR, its history, its types, and the type of AR adopted in this study. This chapter also reviewing literature on AR as a means of teacher PD, kinds of support needed for teachers to conduct AR, and recent studies on teacher AR.

2.1. Teaching and Learning English in the Indonesian Context

This section reviews the literature on teaching English in the Indonesian context in which English is a foreign language (EFL). The discussion covers the role of English in Indonesia, the curriculum implemented in teaching English, and the teachers' roles.

2.1.1. The role of English in Indonesia

In general, English has at least three statuses, including a mother tongue, a second language, and a foreign language. In Indonesia and several countries such

as China, Japan, and Mexico, English is a foreign language. As a foreign language, English embraces the following criteria: 1) English is not used as a vernacular language; 2) English is not mandatory language for education, official affairs, law affairs, businesses, or mass media; 3) English is a compulsory subject in the formal education since the secondary school and university; 4) in a certain circumstances, English is being used to deliver lectures and in the references; 5) English is used by particular group of people who work in tourism industry, and non-government business in which people need to use English actively. In the Indonesian context, English is not the only foreign language. However, among several foreign languages, English was declared as the first official language (the Ministry of Education Decree No. 096/1967, 12 December 1967). It puts English into the first priority to learn at schools in Indonesia. The reason of deciding English as the first foreign language is that English is regarded as the language of science and technology that about 90% of references are written in English (Nurkamto, 2000). Hence, learning English is about to enhance and promote the development of Indonesia.

The status English in Indonesia as the first official foreign language has some implications as in the following: 1) English is the first foreign language learned and becomes a compulsory subject at schools from the junior high school to the university levels; 2) the objective of teaching English is to provide learners with 'the working knowledge of English'; 3) the language skills which should be mastered by high school graduates are (a) effective reading ability; (b) understanding spoken language ability; (c) writing ability; and (d) speaking

ability. Students are also expected to master vocabulary between 2500 – 3000 words, and appropriate grammar to support the four language skills above. These skills are anticipated to arm students with tools to develop themselves based on their field of interest such as science, technology, and culture and art. Under this framework, students are expected to grow well as smart and handy people and are ready to take part in the development of Indonesia.

Among the four language skills, reading has more priority. The priority on reading is relevant to the objective of English teaching for high school graduates who continue their study in the universities. As widely known that most activity conducted by the students in the university is reading. Hence, the university students have to be able to read effectively so that they can optimise and get most benefits from reading the English references. As for the other three language skills: speaking, listening and writing are hardly ever used in the university, except by particular schools such as in the English Department in which the students use English very actively (Depdikbud, 1995). Given English as learning priority, the emphasis in the process of English teaching and learning at schools and in the universities is on the reading activities. Likewise, the evaluation and the criteria for students' achievement are based on the aspects of reading.

2.1.2. English Curriculum in Indonesia

During the last thirty years, there had been four different English curriculums implemented in Indonesia. This curriculum included the 1968 Curriculum, the 1975 Curriculum, 1984 Curriculum, and the 1994 Curriculum. Recently, when

this study started, Indonesia adopted another new curriculum that is called the Competency-based Curriculum. However, since the new curriculum is still being introduced and is not expected to be fully implemented until 2004, this curriculum is not discussed in this study. The names of the four curriculums represented the year of which each curriculum was implemented. So, the 1968 Curriculum was the curriculum that began to be implemented in 1968, and respectively for the 1975, 1984, and the 1994 Curriculums.

Each of the curriculums had their own characteristics. In general the four curriculums can be grouped into two types. The first type which was based on the structural approach was the 1968 and the 1975 Curriculum; and the second type which was based on the communicative or meaningful approach was the 1984 and 1994 Curriculum. As each approach had different basic concept and paradigms, they also brought different implications in the process of teaching and learning. Linguistic theory as mentioned by Nunan (1991) affected the trend of language teaching. In this case, the linguistic theories that differentiated the two types of curriculums are the *linguistic competence* (Chomsky, 1965), and the more applicable one – the *sociolinguistic competence* (Hymes, 1978). While Chomsky's theory more emphasised on the language forms (*usage*), Hymes' focused more on the language *use*.

Curriculum which was based the structural approach consisted of grammatical terms, and each unit or lesson was labeled by the grammatical terms, such as *the definite article, the past tense, and the participles.* Wilkins (1987) suggests that

the syllabus of this curriculum broke down the language units into smaller grammatical categories so that it had psycholinguistic validity that learning English is easier when students learnt one grammatical unit at a time. However, as mentioned by Wilkins (1987), some criticisms about the structural-approach curriculum suggest that: 1) students had difficulties to implement their grammatical competence because of a lack of opportunity to use the language; 2) the curriculum was not effective as it aimed at providing students with all the grammatical terms without considering the benefits for the students; 3) it was quite often that sentences with the same structures had different meanings. In real life, understanding and producing the intended meaning were more important; 4) grammatical syllabus did not enhance the needed situations that enabled students to obtain their communicative competence.

The curriculum that was based on the communicative approach emphasised more on the meaning (notion) of the language. It focused on the meaning that students wanted to communicate in the target language. The grammatical units were chosen to support the communication need. In this case, one meaning might be presented in two or more forms. This model of curriculum comprised two categories: grammatical and function. The term of notion or notional syllabus referred to these two categories (Wilkins, 1987). As an illustration, to ask a name, for example, students could express it through: 1) an interrogative sentence: *What is your name?*; 2) a declarative sentence: *You haven't told me your name*; or 3) into an imperative sentence: *Tell me your name.* The 1984 and the 1994 Curriculum were based on the communicative approach. The difference

was on the syllabus and the teaching and learning strategies. The characteristic of the 1984 Curriculum syllabus was discrete where language skills were taught separately (Depdikbud, 1987). On the contrary, the 1994 Curriculum adopted thematic syllabus and integrated strategies of English teaching and learning (Depdikbud, 1995). The thematic syllabus of 1994 Curriculum are reflected from the themes which organised the four language skills (reading, listening, speaking, and writing) and other language elements (grammar, vocabulary, and pronunciation). The strategies for the teaching and learning of the language skills are integrated and supported by the language elements. The model of this syllabus and learning strategies are anticipated to encourage students to use the target language as much as possible in the classroom for the communicative purposes.

2.1.3. Teachers' role in the teaching and learning process

Richards and Rodgers (1993: 77) indicate that language teachers' roles are to fasilitate the communicative proses among students in the classroom, and between the students with various activities conducted during the lessons. In addition, a teacher also acts as an *'independent participant'*. Both roles require teachers to organise, lead, and monitor the learning process. Richards (1998) elaborate six factors which build main skills and competence in the teacher education which include: 1) teaching theory; 2) teaching; 3) communication; 4) subject matter knowledge; 5) paedagogical reasoning and decision making; and 6) contextual knowledge.

The teaching skill becomes the main competence for teachers. This skill comprises the following dimensions: 1) selecting learning activities; 2) preparing students for new learning; 3) presenting learning activities; 4) asking questions; 5) checking students' understanding; 6) providing opportunities for practice of new items; 7) monitoring students' learning; 8) giving feedback on student learning; and 9) reviewing and reteaching when necessary (Richards, 1998). In particular, there are more skills to obtain for language teachers, such as: 1) preparation of communicative activities; 2) organisation and facilitation of communicative interaction; 3) judgment of proper balance between fluency and accuracy; 4) awareness of learners' errors; and 5) appropriate treatment errors.

The discussion above shows a wide variety of teachers' roles in the teaching and learning process. In the real life, teachers engage themselves in various activities and dynamic roles as in: delivering assignments; explaining how to do the assignments; motivating students; supervising students to complete the assignments; monitoring students' behaviour; and evaluate the students learning. These roles need to play in the classroom in order to promote students learning.

2.2. Teachers' professional development

This section focuses on reviewing the literature on PD. It starts by reviewing definitions of PD that are currently considered to be relevant. It then goes on to review factors which contribute to effective PD, to consider the settings of PD, and the need for teachers to undertake PD activities, and AR as a way to of conducting PD.

2.2.1. What is professional development?

Teacher development covers personal and professional areas. This involves learning which is sometimes *"natural and evolutionary"*, sometimes *"opportunistic"* and sometimes the *"result of planning"* (Day, 1999: 1). Traditionally PD was often perceived as series of unrelated, short-term workshops and presentations with little follow-up or guidance for implementation; and separated from day-to-day tasks of educators (Craft, 1996; Laferriere, 1999). In addition, traditional PD was mostly defined as the acquisition of subject or content knowledge and teaching skills. Nowadays, however, PD includes broader perspectives. Fullan (1991: 326) expands the definition of PD to include *"the sum total of formal and informal learning experiences throughout one's career from pre-service teacher education to retirement"*. Day (1999: 2) identifies the concept of PD to include,

> *the largely private, unaided learning from experiences through which most teachers learn to survive, become competent and develop in classrooms and schools; as well as* informal *development opportunities in school and the more* formal *'accelerated' learning opportunities available through internally and externally generated in-service education and training activities.*

He emphasises that PD should be *"intended to be of direct or indirect benefit to the individual, group or school and to contribute, through these, to the quality of education in the classroom"* (Day, 1999: 4). These characteristics differentiate PD from the traditional approach, which was usually called in-service training or courses. Smyth (1982: 333) argues that these terms are problematic because

teachers are placed in the:

> *role of passive recipient of information and [are] founded on a belief about some kind of deficit model. The implicit presumption is that teachers have weaknesses in their teaching, or gaps in their knowledge, that require correction. In most cases there has been no real attempt to ascertain where teachers are at their personal and professional development.*

Teacher PD in Indonesia is not far from this traditional concept. Discussions with teachers in this study and in my role as a university teacher educator revealed that they often did not really benefit from the training or courses they took. One of the reasons is that the training is usually planned and designed by the authority or PD activity providers. Teachers reported that the material which was presented in the training did not always applicable or had direct benefits in the classroom. Moreover, there is a lack of monitoring of the implementation of knowledge from the training (Supriadi, 2003). So, the follow-up from the training, whether it was carried out in the classroom or not, relied on the teachers' perceptions of its relevance or importance. Some teachers might assume that there was a lack of urgency to apply the knowledge obtained from the training. They might find it unnecessary to apply the knowledge since they we confident with the way they teach. Yet, other teachers who wanted to implement the knowledge from the training in their practice sometimes found it difficult because of time constrains, overloaded duties, and lack of teaching materials (Rochsantiningsih, Nurkamto, Suparno, & Suyitno, 1998).

A study on teachers' perceptions of PD indicated that training was also perceived as the main remedy to cure the endless problems in education (Supriadi &

Hoogenboom, 2003). Instead of seeing the problem holistically and contextually, the authority viewed teachers as the main reason. Hence, to overcome the problems, authorities in education considered that teachers should improve their competence through training. However, Surachmad (2000) cynically commented that training was wasting time and money; it only gave teachers time to escape from their tiring routines. In the interview, he described that PD programs in Indonesia were similar to learning to swim, *"all theories and skills of swimming were given* [to the teachers], *but one essential thing they missed was the swimming pool itself"* (Surachmad: 30-10-02, 1). This was to illustrate that the PD programs were often not relevant with and non-applicable in the class situation. Nevertheless, attempts to improve teaching quality have been made through seminars and projects, which concluded by offering recommendations. However, the implementation of the recommendations depends on the authorities and other factors, particularly the availability of funding.

2.2.2. Effective professional development

Effective PD as described in this section is taken from debates that have occurred in ELT within western contexts. To adopt the concepts of effective PD in the Indonesian context needs further study since the growth of teachers' PD is not as prevalent as in western countries. However since Indonesia is now starting to implement the newly regulated autonomy in education, it is anticipated that the education system will not be as centralised and will positively affect the way teachers' PD perform. For the time being, while implementing this policy,

Indonesia is in the process of finding the *right* models and strategies for autonomy in education within its context. The aim of exploring effective PD in this section is to illustrate its characteristics and the strategies to obtain it. Whether this model is applicable in Indonesia, it needs further scrutiny relating to the context and culture in Indonesia.

The purpose of PD as summarised by Blandford (2000: 5) is for the enhancement of knowledge, understanding, skills and abilities that will enable individual teachers and the school-learning organisations in which they work to:

- *develop and adapt their range of practice;*
- *reflect on their experience, research and practice in order to meet pupil needs, collectively and individually;*
- *contribute to the professional life of the school, and as practitioner interact with the school community and external agencies;*
- *keep in touch with current educational thinking in order to maintain and develop good practice;*
- *give critical consideration to educational policy, in particular how to raise standards;*
- *widen their understanding of society, in particular of information and communication technology.*

To achieve the purposes above, Craft (1996: 8) insists effective PD which adopts these approaches is characterised by:

- *greater emphasis on basing professional development on careful needs analysis;*
- *moves towards a broader view of what in-service education and professional development are;*
- *a concern to ensure that school and individual needs are addresses through professional development activities;*
- *the use of school development planning and professional interviews/appraisal to inform the planning of professional development;*
- *moves towards building evaluation into professional development and asking questions, through this, about the effect of professional development devilment on practice;*

- *current interest in seeing initial teacher training, induction and professional development as a continuum of professional competence and in personal professional development portfolios providing a structure for planning development work.*

Darling-Hammond (1998: 6) argues that effective PD needs to apply strategies that are:

- *experiential, engaging teachers in concrete tasks of teaching, assessment, and observation that illuminate the process of learning and development;*
- *grounded in participants' questions, inquiry, and experimentation as well as profession wide research;*
- *collaborative, involving a sharing of knowledge among educators;*
- *connected to and derived from teachers' work with their students as well as to examinations of subject matter and teaching methods;*
- *sustained and intensive, supported by modelling, coaching, and problem solving around specific problems and practice;*
- *connected to other aspects of school change.*

She claims that these approaches lead teachers to broader roles in which they confront research and theory directly, to be regularly engaged in evaluating their practice, and to use their colleagues for mutual assistance.

2.2.3. Settings of professional development

PD settings are necessary to classify, because as Day (1999: 3) suggests, the analysis of PD settings,

> *draws attention to the importance of informal learning which derives its purposes and direction from the goals of teachers' work; and illustrates the relatively small proportion of learning in the workplace that formal education and training contribute.*

This section discusses the settings of PD from the perspectives of three different authors who provide a variety of points of view. However, all of the PD settings described below provide activities which offer teachers the opportunity to learn. Craft (1996) relates the settings of PD to *"methods, location"* and their *"length"* of time. What he suggests by methods relating to PD is a learning process which can be conducted through,

> *action research, self-directed study, using distance-learning materials, receiving on-the-job coaching, mentoring or tutoring, school-based and off-site courses of various lengths; job-shadowing and rotation, membership of a working party or task group, teacher replacement, personal reflection, 'experimental assignments', and collaborative learning. (Craft, 1996: 7)*

By location, he refers to the, *"off-site professional development, school-based professional development, and school-focused professional development"* (Craft, 1996: 7). Relating to the length of PD, Craft (1996: 7) suggests that PD can take,

> *long opportunities about 1-3 years (following through school development plan, job rotation, local or national curriculum development; short opportunities between 2-20 days (short courses, teacher replacement), and incidental opportunity of 1 day or less (one-day course, study days).*

In contrast, Day (1999: 3) offers three settings from the modes of PD in which learning occurs:

- direct teaching *(through, for example, conferences, courses, workshops, consultations);*
- learning in school *(through, for example, peer coaching, critical friends, quality review, appraisal, action research, portfolio assessment, working on tasks together);*
- learning out of school *(through, for example, reform networks, school-university partnerships, professional development centres, subject networks and informal groups).*

Blandford (2000: 6) perceives settings of PD from the perspective of institutions or individual who conduct and provide activities of PD. These are summarised into four major points as follows.

- *practitioner development (school base development, self-development, induction, mentioning, observation, job-shadowing and team teaching);*
- *professional education (award bearing courses managed and taught at higher education institutions, ... focusing on the relationship between educational theory and practice, and leading to higher education accreditation and professional qualifications);*
- *professional training (conference, courses and workshops that emphasis practical information and skills, managed and delivered by local education authorities, ... Such courses may lead to academic awards or accreditation towards national standards;*
- *professional support (provided by colleagues and managers in fulfilment of contractual conditions of service; e.g. recruitment and selection procedures (including job descriptions), promotion, career development, appraisal, mentoring, team building, redeployment and equality of opportunity.*

To support teachers' PD, Indonesia may adopt any of the settings above which are suitable for the context. Appropriate settings might vary and adopt multiple ways of addressing PD needs. In addition the adoption of any of PD setting also needs to be culturally and educationally appropriate to Indonesia. Whatever the setting however, it is important that it is devoted to the development of a clear sense of purpose and a share vision, the building of a collaborative culture, the learning of new leadership roles for the governance of schools, and reflective practices and critical inquiry (Darling-Hammond, 1990). In adopting any of the PD setting above, teacher development programs should be well prepared, involve teachers in planning and deciding the setting, and be supported by schools, government, and facilitators. In addition, during the process of

identifying their needs teachers are required to exercise their reflective practice by continually questioning, and looking for ways to improve their teaching. Involvement of teachers is likely to lead to more effective and efficient PD, where it could be anticipated that they would be able to achieve the most benefit.

2.2.4. The need for teachers to participate in professional development

Learning, as described by Blandford (2000), is a fundamental component of the work of any profession, and for teachers, this does not only include the requirement to keep their academic knowledge up-to-date. Teachers need to regularly update their understanding of the ways in which children and adults learn. Teachers also need to learn about effective ways of teaching and school organisation. Besides that, teachers need to maintain their wider knowledge of trends outside schools including policies and regulatory frameworks for education (Blandford, 2000). In addition, as argued by Darling-Hammond (1990) educational reform requires teachers not only to update their skills and information but also totally transform their role as a teacher. Guskey (2000) presents as similar idea by saying that PD is necessary for teachers and administrators at all levels so that they can learn these new roles and succeed in them. Similarly, Blandford (2000: 2) insists that, " ... *the importance of the PD of teachers for the raising of standards is now recognised by theorists, policy-makers and practitioners*". In line with his idea, Day (1999: 2) offers ten guidelines that should underpin teacher PD:

1. Teachers are the schools' greatest assets.

2. One of the main tasks of all teachers is to inculcate in their students a disposition towards lifelong learning.
3. Continuing, career-long professional development is necessary for all teachers in order to keep pace with change and to review and renew their own knowledge, skills and visions for good teaching.
4. Teachers learn naturally over the course of a career. However, learning from experience alone will ultimately limit development.
5. Teachers' thinking and action will be the result of interplay between their life histories, their current phase of development, classroom and school settings, and the broader social and political context in which they work.
6. Teaching ... is a complex process. ... Successful teaching will always demand both intrapersonal and interpersonal skills, and personal and professional commitment. It is a synthesis of the head and the heart.
7. The way the curriculum is understood is linked to teachers' constructions of their personal and professional identities. Content and pedagogical knowledge cannot, therefore, be divorced from teachers' personal and professional needs and moral purposes. It follows that professional development must pay close attention to these.
8. Teachers cannot be developed (passively). They develop (actively). It is vital, therefore, that they are centrally involved in decisions concerning the direction and processes of their own learning.
9. Successful school development is dependent upon successful teacher development.
10. Planning and supporting career-long development is the joint responsibility of teachers, school and government.

Within these precepts, then, teacher PD is *"a serious business, central to maintain and enhancing the quality of teachers and the leadership roles of principals"* (Day, 1999: 2).

Basically, many educators in Indonesia would share Day's view that teachers are the schools' greatest assets. Ironically, however, teachers have also been assumed by some to be the weakest link in the ongoing educational problem chain (Surachmad, 2000). As a consequence, teachers have become the main target of improvement planned by authorities. This is quite contrary to the seventh area outlined by Day above in which teachers have power to decide their

needs and undertake PD. Another point to highlight from Day's list above is the eighth area outlined above, where co-operation between supporting institutions is very vital in the teachers' growth. The recent policy of autonomy in education introduced in Indonesia would potentially appear to provide an opportunity for a stronger focus on teacher education through more effective and innovative PD programs. In this respect the guidelines offered by Day would provide an effective starting point for implementation.

2.2.5. Teachers as researchers

Guskey (2000) points out that the majority of educators are thoughtful, inquiring individuals who are inclined to solve problems and search for answers to pressing questions. In line with his idea, Garrido, Pimenta, Moura, & Fusari, (1999: 389) say that teachers are challenged by:

> *unpredictable and ambiguous situations, in which the participants (students, peers, parents and administrative personnel) are also subjects, acting according to their different, and sometimes conflicting, interests, values and perceptions.*

These opinions imply that the nature of teaching involves teachers in problems, which lead them to undertake further investigation to find better solutions. In addition, as professional people it is unarguable that teachers need to develop continuously throughout their career. There have been many strategies or programs offered in ELT contexts, formally and informally, to improve teachers' PD. Concurrently, there have also been more calls for further research on PD and on teacher's learning. One of the features expected from effective strategies of

PD is that these strategies should be able to change problems encountered by teachers into a challenge (Wallace, 1998). Instead of being threatening, the strategies should help and encourage teachers who deal with problems to exercise their self-improvement. Bunning (1995: 2) sums up that an ideal process of PD should:

- *be directly related to current operating procedure and problems;*
- *involves a high proportion of staff;*
- *involves the stimulation of new paradigms and fresh approaches;*
- *not involve high levels of expenditure; and*
- *foster collaboration and teamwork in the process.*

In this respect, Stenhouse (1975: 165) emphasises the importance for teachers to investigate their practice.

> *... it is difficult to see how teaching can be improved or how curricular proposals can be evaluated without self-monitoring on the part of teachers. A research tradition which is accessible to teachers and which feeds teaching must be created if education is to be significantly improved.*

Yet, typically academic research does not seem to be able to facilitate this challenge. The reason, as Hopkins (1993) argues is that the academic research makes a distinction between theory, research and practice. Academic research concerns more on discovering truth for the importance of theory. Whereas Nunan (1989b: 17) states that, *"the field of educational research is different from many other areas of research because education is essentially a practical rather than a theoretical activity"*. Cohen and Manion cited in (Richards & Nunan, 1990) highlight AR as an alternative of applied research. They suggest that unlike applied research which does not provide directly the solutions to the problem,

AR is directly focused on problem solving in a specific context as AR is situational, or context-based, collaborative, and self-evaluative. The implementation of findings from applied research undergoes hierarchical procedures in which teachers are, *"to accept the innovation and use it in a prescribed way"* (Altrichter, Posch, & Somekh, 1993: 202). Unlike in applied research, findings from AR is directly accessible into classroom context, *"[AR] is a search for answers to questions relevant to educators' immediate interests, with the primary goal of putting the findings immediately into practice"* (Mckay, 1992: 28). In AR where teachers engage in the process of systematic study of their teaching and student learning, they are active participants who, *"take purposeful responsibility for improving practice, and secure ownership of professional knowledge"* (Miller & Pine, 1990: 33). Moreover, as argued by Altrichter et al. (1993: 201), while AR enhances improvement, at the same time AR also,

> *rejects the ideas that changes and improvement are needed because there is some deficiency or failure on the part of teachers, and sees change instead as an inevitable and important part of being a professional.*

Cohen and Manion cited in Richards and Nunan (1990: 63-64) stress that AR is very beneficial for teachers to develop themselves as a means of:

- *remedying problems diagnosed in specific situations, or improving in some way a given set of circumstances;*
- *in-service training, providing teachers with new skills and methods and heightening self-awareness;*
- *injecting additional or innovative approaches to teaching and learning into a system which normally inhibits innovation and change;*
- *improving the normally poor communications between the practising teaching and academic researcher;*

- *(although lacking the rigour of true scientific research) as a means of providing an alternative to the more subjective, impressionistic approach to problem solving in the classroom.*

To close this section, the following table adapted from Miller and Pine (1990: 34) comparing traditional approach of PD and AR approach is relevant to summarise the discussion in this section.

Table 2.1. Approaches of Professional Development for Teachers

Factors	**Traditional Approach**	**AR Approach**
1. Source of expertise	External authority	Participating practitioners
2. Locus of knowledge	Formulated outside the context	Located in context and problem situations
3. Experience	Draws from a formulated body of knowledge	Draws from teacher interactions with learners and situational realities
4. Initiative	Arises from system and administrative problems and priorities	Emerges from teaching learning situations and needs
5. Leadership	Program administrator	Group centred leadership
6. Mode of organisation	Individual and passive	Collaboration for engagement

Miller and Pine (1990: 34) argue that under traditional PD approach, teachers, *"have limited opportunities for developing their potential as professionals or for making creative contributions"*. In contrast, AR approach, *"challenges teachers and offers significant participation in educational improvement"* (Miller & Pine, 1990: 34).

2.2.6. Action research for teacher professional development

There are various definitions of AR suggested by different practitioners. Carr and Kemmis (1986: 162) define AR as,

a form of self-inquiry undertaken by participants in social

> *situations in order to improve the rationality and justice of their own practices, their understanding of these practices, and the situations in which the practices are carried out.*

In the educational context, McKernan (1996: 5) defines AR as:

> *The reflective process whereby in a given problem area, where one wishes to improve practice or personal understanding, inquiry is carried out by the practitioner --- first, to clearly define the problem; secondly, to specify a plan or action --- including the testing of hypotheses by application of action to the problem. Evaluation is then undertaken to monitor and establish the effectiveness of the action taken. Finally, participants reflect upon, explain developments, and communicate these results to the community of action researchers. Action research is systematic self-reflective scientific inquiry by practitioners to improve practice.*

Davis (1985: 4) defines AR as a

> *systematic process whereby practitioners engage in a spiral of reflection, documentation, and action in order to understand more fully the nature and/or consequences of aspects of their practice with a view to shaping further action or changing their situation preferably in collaboration with colleagues.*

More specifically, the teacher AR movement, as defined by Elliot (1991: 69) is *"concerned with the everyday practical problems experienced by teachers, rather than the theoretical problems defined by pure researchers within a discipline of knowledge"*. Different definitions of AR above share the same aims: *"to improve"* and *"to involve"* (Carr & Kemmis, 1986: 164; Grundy, 1987: 142). AR involves three *"improvement"* areas: improvement of *a "practice"*, the *"understanding"* of the practice by its practitioners, and the *"situation"* where the practice takes place (Carr & Kemmis, 1986: 164). Grundy (1987) suggests

that improvement is closely linked with the understanding of the practice which means that AR connects understanding and improvement, knowledge and action, theory and practice. The aim of *"'involvement' refers to the belief that those who engage in the practice should be involved in the AR process in all its stages of 'planning, acting, observing, and reflecting'"* (Carr & Kemmis, 1986: 165). Grundy (1987: 145) takes the *"involvement"* as being the democratic aspect of AR, *"if participants make their own decisions, change is more likely to result"*. Similarly, Altrichter et al. (1993: 207-208) clarify that democratic means *"bringing those who are usually 'subjects' of the research to a position where they have equal rights and responsibilities"*.

Hopkins (1993) sees AR as an informal, formative, subjective, reflective and experiential model of inquiry in which all individuals involved in the study are knowing and contributing participants. Kemmis and McTaggart (1988: 5) point out the importance of teachers conducting AR by connecting the terms *"action"* and *"research"* as follow:

> *The linking of the terms 'action' and 'research' highlights the essential feature of the method: trying out ideas in practice as a means of improvement and as a means of increasing knowledge about curriculum, teaching and learning. The result is improvement in what happens in the classroom and school, and better articulation and justification of the educational rationale of what goes on action research provides a way of working which links theory and practice into the one whole: ideas-in-action.*

Based on the idea above, Richards and Nunan (1990: 63) summarises that,

> *AR is not simply research grafted onto practice. Rather, it represents a particular attitude on the part of the practitioner, an attitude in which the practitioner is engaged in critical reflection on ideas, the informed application and experimentation of ideas*

> *in practice, and the critical evaluation of the outcomes of such application.*

Burns (in press: 3) summarises the essential concepts and principles of AR as follows:

> 1. *Action research is localised and commonly small-scale. It investigates problems of direct relevance to the researchers in their social contexts, that is, it is based on specific issues of practice.*
>
> 2. *Action research involves a combination of action and research that means collecting data systematically about actions, ideas and practices as they occur naturally in daily life.*
>
> 3. *Action research is a reflective process aimed at changes and improvements in practice. Changes come from systematically and (self-)critically evaluating the evidence from the data.*
>
> 4. *Action research is participatory, as the 'actor' is also the researcher and the research is done most effectively through collaboration with others.*

In building the theory of AR, as Melrose (2001) summarised, it is based on educational theories which have been developed from action learning, praxis, experiential learning, personal construct theory, critical education, action science, reflection, and soft system methodology. Although these theories are different to each other, the similarity among them that supports AR includes,

> *ideas about being critical, evaluative, systematic, strategic, participatory, collegial, collaborative, self-reflective about practice, empowering, emancipatory, and having theory inform practice and practice inform theory. (Melrose, 2001: 161)*

In education, Carr and Kemmis (1986) argues that AR has been adopted in school-based curriculum development, PD, school improvement programs, and system planning and policy development. Within this respect, Delong (1996: 6)

shows that literature and research on teachers' growth suggest that AR is an effective strategy because it focuses on promoting *"learning"* rather than delivering *"instruction* or *training"*. Delong (1996: 6) argues that this is crucial since,

> *learning is a natural cumulative activity that individuals undertake in order to meet perceived needs by changing themselves. Training on the other hand, is the attempt by authorities to direct the potential of learning in the individual.*

Another aspect of AR that distinguishes it from other research, as pointed out by Gabel (1995), is the degree of empowerment shared by all participants. All participants have important roles in interpreting meaning which is derived from the data and contributing to the selection on interventionary strategies.

Many literature of AR reveals various definitions and approaches (Burns, 1999; Calhoun, 1994; McNiff, 1988; Russell & Korthagen, 1995; Tinker-Sachs, 2002; Whitehead, 1989). AR is often closely related to the terms of reflective practice, teacher research, school-based collaborative research, and practitioners' research. However, one commonly held perception seems to be that AR describes practitioners studying or reflecting on their own practice in order to improve it. AR is believed as a process of inquiry rather than a project or a program (Kemmis & McTaggart, 1988). AR offers teachers the opportunity to investigate their work through the four stages of planning, action, observation and reflection to plan further action. This process is sometimes assumed as common thing done by all teachers as reflected in this question *"But isn't that what every practitioner does?"* (Kemmis & McTaggart, 1988: 83). Yet, if conducted

through AR the *common thing* is different because AR is believed to have more rigour, system and care, than that which occurs in everyday life (Brown, 1995). Hence, systematic and conscious intention differentiates AR to the *common thing*.

AR helps teachers become more reflective practitioners, more systematic problem solvers, and more thoughtful decision-makers as AR is characterised as *" ... a form of self reflective inquiry carried out by practitioners, aimed at solving problems, improving practice or enhancing understanding"* (Nunan, 1992a: 229). It helps narrow the gap between theory, practice and research so that teachers involved in AR are better at: *"clarifying"* what works well in their teaching; *"articulating"* more clearly their reasons for their practice; countering ill-informed or malicious criticism with *"evidence";* being *"less defensive"* in response to criticism/feedback; *"monitoring"* the effect of any current practice; monitoring the effect of any change practice; *"acting powerfully"* in their work situation (Davis, 1985: 6)

AR has been described as a process designed to empower all participants in the educational process (students, instructors and other parties) with the means to improve the practices conducted within educational experiences (Hopkins, 1993). Unlike the traditional research, findings from AR study can be implemented directly to the classroom setting. In implementing the findings, teachers' roles are dominant, as while implementing, at the same time they also observe and evaluate the implementation. This process leads to improvement to teaching and learning. Should this process becomes a routine in teachers'

practice, ultimately it leads teachers to become reflective of their teaching (Nunan, 1989b). Richards (1991) suggests that reflective teaching is an essential approach in teachers' life which promotes the growth of understanding and awareness of what happened in the classes. This, as Richards (1991) says is the key to a teacher's ongoing PD.

This section has reviewed relevant literature related to teacher PD concerning its nature, characteristics of effective PD, types of the settings of PD, and a review on AR as an option of teacher PD. To provide further description on the nature of AR, the following section will present an overview of AR from its theoretical point of view.

2.3. Action research: theoretical orientation

An overview of AR is presented in this section. It highlights the nature of AR, traces the history of AR, and identifies types of AR. Finally, a decision on the type of AR adopted in this study will also be presented.

2.3.1. A brief history of action research

Kurt Lewin is often referred as the founding father of AR (Adelman, 1993; Burns, 1999; Kemmis & McTaggart, 1988). Lewin mentioned the term AR for the first time in the late 1940s in his paper *Action Research and Minority Problems* (O'Brien, 1998), although many believe that he was not the first person to coin this term (Burns, in press). It is argued that the increasing popularity of

AR in education has a much older history than that. McKernan (1996: 8 - 11) provides evidence that AR is rooted in the *"Science in Education movement"* of the late nineteenth century and it has undergone an evolution since then. He notes that AR was influenced by a number of distinctive people prior to Lewin. However, McKernan (1996: 9) admits that it was Lewin who *"constructed an elaborate theory and made AR 'respectable' inquiry for social scientists"*. Lewin cited in O'Brien (1998: 9) characterises AR *as "a comparative research on the conditions and effects of various forms of social action and research leading to social action"*, using a process of *"a spiral of steps, each of which is composed of a circle of planning, action, and fact-finding about result of the action"* .

McKernan (1996: 8-11) identifies movements that historically and philosophically influenced AR. He notices there are at least five movements as summarised in the following.

The Science in Educational movement of the nineteenth and early twentieth century with the idea of applying scientific method to education particularly by (Bain, 1879; Boone, 1904; Buckingham, 1926).

Experimentalist and progressive education thought particularly by (Dewey, 1910) with his *stages of reflective thinking* which embraces *"all the features of scientific AR of the post-war reconstructionists"* (McKernan, 1996: 9). It was John Dewey who *"applied the inductive scientific method of problem solving as a logic for solution of problems in such fields as aesthetics, philosophy, psychology and education"* (McKernan, 1996: 9).

The Group Dynamics movement in social psychology and human relation training. Qualitative social inquiry which was used to address social problems in the nineteenth century became popular again in 1940s to deal with social problems which required a social science response. Practitioner inquiry and AR were regarded as credible responses. Among the researchers of this period, Kurt Lewin is reported as the one who,

> *argued that social problems should serve as the locus of social science research. Basic to Lewin's model is a view of research composed of action cycles including analysis, fact-finding, conceptualisation, planning, implementation and evaluation of action. (McKernan, 1996: 9)*

The Post-war 'Corey-era' reconstructionist curriculum development in the USA. In the era of the 1950s AR gained its greatest popularity in education. Stephen Corey as the leading researcher of this era *"believed that AR could significantly change and improve curriculum practice principally because practitioners would use the results of their own research investigations"* (McKernan, 1996: 10). This focus was also known as *"co-operative action research"* since the research was done by outside researchers co-operating with teachers and schools (McKernan, 1996). However, by the end of the 1950s AR declined in popularity. Sanford (1970, cited in McKernan, 1996: 10) suspected the split of science and practice; the shift towards the establishment of expert educational research; and popularity of laboratories which led the separation of theory and practice as the reasons of AR popularity decline. As a consequence this prevented researchers from studying problems in the field (McKernan, 1996).

The teacher-researcher movement was pioneered by Stenhouse (1971) in Britain through the Humanities Curriculum Project. His argument as summarised by McKernan (1996: 11) is that,

> *all teaching ought to be based on research, and that research and curriculum development were the preserve of teachers; the curriculum then becomes a means of studying the problems and effects of implementing any defined line of teaching.*

Within this framework, the practitioner gains increased understanding of his or her work and thus teaching is improved.

2.3.2. Types of action research

Action researchers classify AR into three types. While Grundy (1987: 148) and Tripp (1984:12) refer to *technical, practical, and emancipatory;* McKernan (1996: 19-27) adopts these terms: *the scientific-technical view of problem solving; practical-deliberative action research;* and *critical-emancipatory action research.* For practical reasons, Grundy's and Tripp's terms: *technical, practical, and emancipatory* action research are used here. Each of them is described as follows.

Tripp (1984, 12) describes technical AR as:

> *Other-directed (that is, directed by others, where the educational or social practitioner is the implicit 'self'), individual or group, generally aimed at improving existing practices, but occasionally at developing new ones, within existing consciousness and values with an unproblematised view of constraints.*

In this type of AR, it is the researcher who identifies the problem and a specific intervention; it then involves the practitioner who facilitates the implementation of the intervention (Masters, 1995: 4). The typical communication in technical AR mainly flows between the facilitator and the group (Masters, 1995). McTaggart (1991: 27) points out that technical AR usually happens in the situation where *"the teacher [is] testing the applicability of findings (often in the form of generalisations) generated elsewhere"*. Hence, the product of technical AR is *"the accumulation of predictive knowledge, and the major thrust is on validation and refinement of existing theories and is essentially deductive" (Holter & Schwartz - Barcott, 1993: 301,* cited in Masters, 1995: 4). While Grundy (1987: 154) points out the advantage of technical AR as promoting personal participation by practitioners in the process of improvement; McTaggart (1991: 28) claims that it is irrelevant for teachers,

> *What works in general will not work in every classroom ... remains logically disconnected from and irrelevant to teachers' work because they [researchers] do not employ the interpretive categories which teachers' use in understanding, improving and justifying their work.*

Practical AR is summarised by Tripp (1984: 12). as:

> *Self-directed (that is, directed by practitioners), individual or group, aimed as much at developing new practices as at improving existing ones, within consciousness and values from which a sense of what is 'right' is utilised to guide action research, with an unproblematised view of constraints*

The potential problem, the causes, and the interventions in this type of AR are

identified by the researcher and the practitioners (Masters, 1995). The researcher acts as a *"process consultant"* (Carr & Kemmis, 1986: 175) who facilitates the practitioners in articulating their values and concerns, in planning and in monitoring action, and in evaluating the action and its effects (McTaggart, 1991). Meanwhile, practitioners monitor their own educational practices with the immediate aim of developing their practical judgement as individual (Carr & Kemmis, 1986: 203). So the goal of practical action researchers is *"understanding practice and solving immediate problems"* (McKernan, 1996: 20). The benefit of practical AR is the ability to *foster "the development of professionalism by emphasising the part played by personal judgement in decisions to act for the good of the client"* (Grundy, 1987: 154).

Emancipatory AR as summarised by Tripp (1984: 12) involves *"a self-leading group, aimed at developing new practices and/or changing the constraints, with a shared radical consciousness and problematised values"*. Emancipatory AR connects theory and practice through the process of enlightenment (Grundy, 1987: 154). Masters (1995: 6) cites Holter & Schwartz - Barcott' s opinion, (1993) about the goals of emancipatory action researchers are as follows:

> *... to increase the closeness between the actual problems encountered by practitioners in specific setting and the theory used to explain and resolve the problem; ... to assist practitioners in identifying and making explicit fundamental problems by raising their collective consciousness.*

The three types of AR engage different approach to the undertaking of research. However, as McTaggart (1991: 31) clarifies, the three types of AR share some basic features. AR is carried out in a series of cycles of *"deliberate planning,*

action, observation and reflection conducted by practitioners on their own work". What makes each type of AR different is the different kind of facilitator roles involved in the research (Carr & Kemmis, 1986: 202). Using different terms, Grundy (1987: 393) agrees that what makes the three types of AR differ does not lie with the methodologies, but *"rather in the underlying assumption and worldviews of the participants that cause the variations in the application of the methodology".* Grundy (1987: 393) highlights the different type of AR from the perspective of *power* in the group:

> *The differences in the relationship between the participants and the source and scope of the guiding 'idea' can be traced to a question of power. In technical AR it is the 'idea' which is the source of power for AR, and since the 'idea' often resides with the facilitator, it is the facilitator who controls power in the project. In practical AR power is shared between a group of equal participants, but the emphasis is upon individual power of action. Power in emancipatory AR resides wholly within the group, not with the facilitator and not with the individuals within the group. It is often the change in power relationships within a group that causes a shift from one mode to another.*

To close this section, it is relevant to present Zuber-Skerritt's table (1992: 12) which summaries the types of AR .

Table 2.2. Types of Action Research and their Main Characteristics

Type of action research	Aims	Facilitator's Role	Relationship between facilitators and participants
1. Technical	Effectiveness/efficiency of educational practice Professional development	Outside 'expert'	Co-option (of practitioners who depend on facilitator)
2. Practical	As (1) above Practitioners understanding Transformation of their consciousness	Socratic role, encouraging participation and self-reflection	Co-operation (process consultancy)
3. Emancipatory	As (2) above Participants' emancipation from the dictates of tradition, self deception, coercion Their critique of bureaucratic systematisation of the organisation and the educational system	Process moderator (responsibility shared equally by participants	Collaboration

2.3.3. Types of action research adopted in the study

The type of AR which is adopted in this study is presented in this section. Based on the descriptions about types of AR above, aspects of *facilitator's role,* and *aim of the research* determine the type of AR adopted in a study. To identify the type of AR in this study, this section focuses the discussion on the role of the facilitator and the aims of this study.

While the role of facilitator in technical AR is dominant, and in practical AR it is relatively balanced, it is in the emancipatory form of AR that the practitioners' role is more dominant than that of the facilitators. In *technical* AR, *"facilitators have co-opted practitioners into working on externally-formulated questions which are not based in the practical concerns of teachers"* (Carr & Kemmis, 1986: 202). In *practical* AR, the role of facilitator is to *"provide a sounding-*

board against which practitioners may try out ideas and learn more about reasons for their own action, as well as learning more about the process of self-reflection" (Carr & Kemmis, 1986: 203). In emancipatory AR, *"the practitioner group itself takes responsibility for its own emancipation from the dictates of irrationality, injustice, alienation and unfulfillment"* (Carr & Kemmis, 1986: 204).

On reflection, I believe that from the perspective of the facilitator's role my study falls into a *practical type of AR.* In working with teachers as they conducted AR in their classroom, I was their facilitator. My role was to smooth the progress of the study. Instead of applying a prescriptive approach I adopted a *collaborative* approach in which the facilitator takes the role of a critical friend and forms co-operative relationships with teachers rather than authorising their research. This role highlighted: sharing knowledge with teachers instead of being the only source of knowledge; being more understanding than judging; listening and talking rather than talking as teachers listened only; and helping teachers develop their independence through reflective practice rather than being the only authority (Wallace, 1991). This kind of collaboration was established from the beginning of the study and was developed throughout the progress of the study. Teachers were encouraged to take more opportunities and responsibilities in deciding problems; planning solutions; implementing solutions; monitoring, reflecting and planning the next solutions in their study. As teachers engaged in these processes, I made myself available for them to discuss, help, and support their study. Therefore, judging from the role of the facilitator in this study, the

type of AR adopted in this study was a *practical* one.

The aim of the study in *technical* AR as stated by Carr and Kemmis (1986: 204) is:

> *efficient and effective practice, judged by reference to criteria which may not themselves be analysed in the course of the action research process ... may be 'imported' into the situation by the facilitator, rather than emerging from self-reflection of practitioners.*

Grundy (1987) emphasises that *technical* AR is product-directed but promotes personal participation by practitioners in the process of improvement. In *practical* AR, *"participants monitor their own educational practices with the immediate aim of developing their practical judgement as individuals"* (Carr & Kemmis, 1986: 203). In other words, practical AR promotes *"the development of professionalism by emphasising the part played by personal judgement in decisions to act for the good of the client"* (Grundy, 1987: 154). Emancipatory AR promotes a *"critical consciousness which exhibits itself in political as well as practical action to promote change"* (Grundy, 1987: 154).

In reflecting on this study, I perceived that the aim of the research was to answer how the teachers perceived AR, and to what extent their engagement in AR enhanced their PD. To explore these issues, I invited teachers to carry out AR in which they critically investigated their teaching. This study was conducted with a belief that teachers wanted to improve professionally. Hence, from this description it could be concluded that this study is an illustration of practical AR.

Given the characteristics of practical type of AR above, this type was considered suitable with the context of this study where AR is relatively new. The limited experience and research skill from teachers is addressed with practical type of AR rather than emancipatory. Within the practical type of AR, empowering teachers can be promoted while at the same time support is available from the facilitator. When teachers have developed advanced level of knowledge, research skills, and collaboration, then emancipatory type of AR might be implemented.

2.4. Professional development through action research

Literature on teacher development describes how AR helps teachers become more reflective practitioners, more systematic problem solvers, and more thoughtful decision makers (Friesen, 1994; Lomax, Evans, & Parker, 1996). Mckay (1992) believes that educators who engaged themselves in AR tended to be more flexible in their thinking, more open to new ideas, and more able to solve new problems. Davis (1985: 7) notices that AR helps narrow the gap between research and practice. Hence, Davis (1985: 7) believes that teachers involved in AR are better at:

- *clarifying what works well in their teaching;*
- *articulating more clearly their reasons for their practice;*
- *countering ill-informed or malicious criticism with evidence;*
- *being less defensive in response to criticism/feedback;*
- *monitoring the effect of any current practice;*
- *monitoring the effect of any change practice;*
- *acting powerfully in their work situation.*

Thereby, Davis (1985) adds, teachers ensure their future practice is informed by

their conscious evaluation of previous practice; they understand more about what is happening to their students and to them; they expect to change and are not intimidated by pressures to do so – knowing that they can control the type and pace of change.

Similarly, Delong (1996: 6) supports the idea that AR is effective for teachers' PD because it *"promotes learning rather than delivering instruction or training; ...promotes self-generated desire for self-improvement"*. In undertaking AR, teachers go through series of cycles which lead them to identify gaps between the teaching and the actual attainment of student learning outcomes, think critically about their own practices, find solution for problems they encountered, and share their idea with colleagues. Delong (1996: 5) believes that *"AR is an open ended, ongoing, cyclical process. The solution one develops to the initial problems will generate the next problems to be address. This is the catalyst to continuous PD"*.

In a study of reflection with a group of teachers, Fischer (2000) notes that the activities of the teachers' research uncovered their *"transformation"* and *"growth"* as PD in education. He summarises what considers as important components in the process of that transformation and professional development. First is *collaboration*, the awareness that collaboration is of great help and significance to support and challenge each other, and to broaden teacher's perspective and the articulation of a teacher's inquiry. Second is *re-socialisation*: since teacher-research is a new paradigm that differs from academic research, teachers need to re-socialise on the part of and also on the part of the academic community. Then, another component relates to *choice vs. requirement*. This

suggests that teachers in research are best in the situation of choice rather than requirement or top-down administrative mandate in which teachers' resistance is overwhelming. Conducting research because of their choice than because of requirement leads teachers to see its value during the time they observe the changes in their practice. Fourth component relates to *primary beneficiary and transferability.* It is teachers involve in the teacher-research who undoubtedly get the first benefits by improving their understanding and practice in the classroom. The knowledge that teachers generate from teacher-research is highly contextual, so transferability rather than generalisability is one of key criteria of validity in teacher-research. Final component is enhancement of role as teachers. There are important changes that teachers experience by doing classroom inquiry. They become better theorists of their own practice, more able to relate between theory and practice, more able to articulate their intention and assumptions, and more able to be better critics and users of educational research conducted outside the schools. These four factors, as Wells (1994) says, are real bases for PD and for changing schools from within institutional barriers to include teacher-researchers.

2.5. Support for action research

Despite the benefits, teachers, however, may face barriers in their attempts to participate in PD and in AR in particular. These are usually related to problems of isolation, defensiveness, lack of intellectual stimulation, and lack of time (Burns, 1999; Nunan, 1992b; Tinker-Sachs, 2002). Although teachers operate in

a group of other teachers, school structures and organisation often keep teachers working in isolation (Fischer, 2000). Wallace (1998) suggests similar idea as he said that in many ways teaching is a lonely profession. Many teachers are too absorbed by their routine activities to think of their professional growth. This hinders teachers in their efforts to seek information, or share new ideas, techniques, and methodologies. This barrier ultimately can cause defensiveness in their practice. Literature related to the concept of the teacher as researcher suggests that AR is able to minimise the problems above since one of the characteristics of AR is *collaboration*. Collaboration where teachers work together or shares ideas can be beneficial as a way of "revealing important background information, finding solutions to everyday classroom problems, improving self-esteem, and relieving tension (Wallace, 1998). However, sharing ideas between or among teachers is not a routine habit in Indonesia. Presumably the previous centralised system in education has led them to become more

waiting-for type of teachers rather than *self-initiating* teachers; or it could be because of a lack of time due to overloaded tasks at school. In addition, in the Indonesian context there are further problems as teachers have little opportunity for joint PD programs. Improving the situation cannot be the responsibility of one body or individual teachers only. It needs co-operation among the institutions that have direct concern for PD and initiative from teachers themselves. In the meantime, it is valuable to cite what is needed to support teachers who undertake AR. Delong (1996: 7) argues that teachers conducting AR need to be supported as follows:

- *a minimum of two creative, reflective, teachers/administrators as critical friends.*
- *a supportive administrator/principal who encourages risk taking and who celebrates successes.*
- *a school culture that honours professionalism and reflective practice.*
- *time to plan and to record one's research in a journal that includes observations and reflection.*
- *information and in-service on how to frame a question, collect data, analyse data, work with critical friends, share the research process and result with others.*
- *a self-generated research plan, including questions and research processes, validated through discussion with one's critical friends.*
- *the capacity to publish and accredit the practitioners' AR process and results.*

While Delong's list of support is external to teachers, McNiff (1993: 144-145) provides hints from within teachers which help them to survive in carrying out their project of AR. She advises that teachers who undertake AR need to adopt these attitudes:

- *do not give up*
- *enlist the help of colleagues*
- *keep a positive attitude*
- *be prepare to compromise*
- *be generous*
- *go public*
- *join a local AR group*
- *establish a reputation for success*
- *publish reports in journals*
- *have faith in one's personal knowledge*

Davis (1985) on the other hand, offers some suggestions for encouraging other teachers to undertake AR. To be eligible to do that, she recommends that we ourselves need to:

- *have done/be doing AR ourselves*
- *understand the potential for stress, excitement and insight*
- *negotiate well regarding our role and stick to the contract*

- *not take over (even if well intentioned)*
- *counsel a teacher to pace her/himself through the process in a sensible way*
- *be supportive, positive and honest*
- *be absolutely non-judgmental*
- *not expect every staff member to want to carry out AR*

In addition, regarding the roles to adopt to support teachers undertaking AR, Davis (1985) suggests the best ways are:

- *acting as a sounding board*
- *taking the class to free the teacher*
- *providing ideas when asked*
- *providing good quality audio-visual hard and software*
- *providing information about other resource people*
- *valuing evidence of change and growth (including error and periods of 'messiness')*

To summarise this section, Wallace (1998) comments on the importance of collaboration are relevant. He argues that collaboration in AR enables teachers to have depth and coverage of their project in term of data and analysis; validity and reliability since involving others offers research investigated from different angles which leads to better triangulation; and the atmosphere of motivation from

working together is much more obvious that working alone. I would also argue that with motivation teachers are able to support each other to get through the AR project.

2.6. Recent research on action research

This section summarises research on AR particularly as it is adopted as a strategy for teachers' PD. The following summaries include the topics of collaboration, effects on students' achievement, and effects on PD.

Bauder (1997) adopted AR to improve his teaching, as he wanted to find a way to break away from the standard teaching format. During the research, he implemented an action of teacher-guided learning instead of his more usual teacher-directed learning. He allowed students to form groups of three or four to do some "real" science through developing and testing their own hypothesis and asked them to submit a group report. He was impressed with the improvement in quality of the student reports. In addition, he was also happy with the students' feedback on his new teaching strategy as they expressed in their comments:

> *"I liked working on a team better than just looking at the experiments in a book. I feel we learned more this way because we did the experiments". (Bauder, 1997)*
>
> *"I like working out our experiments because you can make mistakes which enables you to learn more". (Bauder, 1997)*
>
> *"I liked this activity and I thought it was fun. It took more thinking than just reading it out of the book". (Bauder, 1997)*

In Burns' study (1999), where she worked over a number of years as a teacher educator and researcher with English as Second Language (ESL) teachers in the Australian Adult Migrant English Program (AMEP), *collaborative* involvement in *AR* contributed significantly to strengthen teachers research skills, and was a powerful route to teachers' PD as reflected by some of the teachers comments during their involvement in the research:

> *It gave me an opportunity to undertake AR and to learn about this method as it related to my teaching.* (Burns, 1999: 1)
>
> *It gave me an opportunity to meet with others outside the centre, to listen to their ideas and their methods of solving problems which seem to be common to all.* (Burns, 1999: 1)
>
> *I felt a degree of personal satisfaction once I collected the data*

> *and completed the write up – a feeling that I had challenged myself and was able to meet the challenge to a certain extent.* (Burns, 1999: 1)

Caro-Bruce and Zeichner (1998) report a study on the nature and impact of a school district sponsored AR PD program for teachers, principals, and other staff in the Madison Metropolitan School District, Madison, Wisconsin. This involved 74 individuals who conducted AR and 10 facilitators of the AR project. The study investigated six areas of research problems including: the nature of the program (AR project) as a PD activity; obstacles and difficulties experienced by teachers while doing AR; the knowledge produced in the program; the influence of the program in the way participants thought about their practice and their actions; the influence of doing AR on pupil learning; the influence of individual studies beyond the classrooms and other learning venues in which they were conducted including on school culture. The findings of the study showed positive effects on teachers, their teaching, and on student learning. The research also suggested that to adopt AR as a PD strategy required particular conditions including intellectual challenge, respect for teachers, and emotional support

Laferriere (1999) conducted a project entitled Pegasus in which she ran a PD project for teachers based upon AR. The participants in the research were representatives from several schools and were expected to act as leaders upon return to their school. The project offered teachers time and opportunity to use computers and investigated how technology can improve student learning. During the study, teachers adopted reflective practice and critical inquiry easily. The finding of the study showed that teacher's satisfaction appeared to be very

high. There is also evidence that teachers used the technology increasingly, and that teaching approaches become more constructivist, *"with more student-centred inquiry-type learning projects resulting in the student production of genuine artefacts"* (Laferriere, 1999: 13).

Over two years, eight elementary, middle, and high schools in Boca Raton, FL, U.S.A. collaborated with a local university for classroom-based AR. The project examined what the participants thought about the research process and the possible effects of AR on their students' classroom performances (Benton & Wasko, 1999). The result of the study revealed that for some teachers the classroom research did not prove entirely satisfactory; but for many others, the opportunity to take part in AR rejuvenated and validated their professional practices. The enthusiasm for the process of AR was high which was evident in the comment of one teacher as he said, *"Let's do it again!"* From many other teachers' comments and reflections it was concluded that the point of the whole project was to impact on student achievement. This is captured by one teacher's comment: *"AR gives teachers the opportunity to examine the achievement of their students through specific data, and also to examine teaching practices and strategies that affect that achievement"* (Benton & Wasko, 1999: 10).

In her book, Tinker-Sachs (2002) illustrates AR projects conducted by six English teachers in Hong Kong to investigate their practices. In the comments to illustrate her views about this project, Tinker-Sachs (2002: vii) says,

> *The process of inquiring into the teacher developmental process through action research was a journey that was found to be*

> *problematic and time-consuming to pressing teaching and curriculum demands. However, all the teacher researchers agreed that the process was worth the struggle and though some of them said they would not do it again, they agreed it was worth doing.*

The project which took two years provides evidence of collaboration between a university researcher and English teachers in an AR project. In her book, AR is reported as new trend of teacher PD in Hong Kong. As in Indonesia, AR also has the same situation, this project provides models of implementation of AR in the place where AR is not a prominence approach of teacher professional growth.

2.7. Summary

To provide fundamental background and to clarify the areas of investigation and the scope of the study, this chapter gives an overview of relevant literature. Since the study was conducted to investigate the high school English teachers' perception about their involvement in AR towards their PD, it was decided that the this chapter focuses on reviewing literature relevant to main areas of: 1) the English teaching in the Indonesian context; 2) teachers' PD; 3) the nature of AR; and 4) teachers' PD through AR.

Given that the study was conducted in Indonesia, it is necessary to provide a comprehensive review of the context of ELT in Indonesia. The review of the relevant literature of this area focuses on the status and the role of English in Indonesia, some of the specific concerns of English teachers, the curriculum implemented in teaching English, and the criticisms addressed to this field. It

was expected that the review offers adequate background information about specific area of English language teaching on which this study is based.

Another important literature review deals with relevant issues about teachers' PD. An extensive library investigation reveals that the literature on teachers' PD are mostly written in the western context. There is very little research available on teachers' PD in the Indonesian context, and even less which limits the discussion on AR. Given this situation, the reviews on teachers' PD provide direct comparison teachers' PD adopted in different countries. Considering the fact that teachers' PD in Indonesia tends to use a traditional and a top-down approach it is considered necessary to review literatures which adopt different kind of PD which employs bottom-up approach and transformative models of PD. The review covers the general issues such as: the nature of PD, the criteria of effective PD practises, the setting of PD, and the need for teachers join PD; and the more specific ones such as: teachers' PD through research, and teachers' PD through AR. The review on this section hopefully is able to provide a wide picture of teachers' PD and the rationale of choosing AR as the main tool to improve PD for the teachers in this study.

The review of AR literature aims to present the logical flow in understanding the nature and the history of AR. The review also identifies the different types of AR, the philosophy and the paradigms underpinning AR. After having the map of AR, the literature review than shows the reasons of choosing AR in this study. Closely related to this issue is the review of relevant literatures of PD conducted

through AR. As mentioned before, the literatures for this section is mostly taken from western context. After choosing AR to promote teachers' AT, logically a review about the nature of AR should follows after that.

Altogether the review of the literatures concerning the ELT in the Indonesian context, teachers' PD, the nature of AR, and the teachers' PD through AR are expected to provide adequate background information on the focus of the study. In the next chapter the methodology adopted in this study will be presented.

Chapter Three
Methodology

This chapter describes the methodology applied in this study. The description traces the various research paradigms used in educational research, locates AR in these paradigms, and argues for the choice of using AR as a methodological approach in this study.

The study investigates teachers' perceptions in relation to whether, and to what extent their involvement in AR enhanced their PD. It was conducted through the engagement of ten HS English teachers in AR projects in their classes for one school term (four months). Before the implementation of these AR projects, the teachers were invited to a series of workshops, which aimed to prepare them with AR knowledge and skills of conducting research, in particular AR.

The data for this study was collected through several steps, prior to the AR workshops, during the workshops, during the implementation of the AR projects, and post AR projects to evaluate the impact of AR to teaching. Some qualitative techniques of data collection were applied in this study, such as interviews, diary, and document analysis. In addition, as the researcher and also the facilitator in this study, I keep journals through out the process of the study. The data obtained was then analysed through several phases, such as assembling the data, coding the data, comparing the data, building interpretation, and reporting the outcomes (Burns, 1999). Each phase of analysis was carried out in order to bring the data

collected into manageable pieces to show the major themes arising from the study.

3.1. Research paradigms

Identifying a paradigm adopted in a piece of research is necessary since the paradigm *"embodies the particular conceptual framework through which the community of researchers operates and in terms of which a particular interpretation of 'reality' is generated"* (Carr & Kemmis, 1986: 72). The paradigm offers different ways of seeing (Burrel & Morgan, 1979). Bassey (1990: 13) suggests that a research paradigm is,

> *a network of coherent ideas about the nature of the world and of the functions of researchers which, adhered to by a group of researchers, conditions the patterns of their thinking and underpins their research actions.*

This section presents an overview of three paradigms: positivism, interpretivism, and critical theory. Each of them as Boland (2001: 2) said has its own,

> *... methodology and methods through which people derive their claims concerning truth ... and has different motives and aims that convey the values that define and inform the purposes of the research undertaken.*

Positivism, that is also known as an *analytic-empirical-positivist-quantitative* paradigm, was regarded until relatively recently as the most reputable paradigm for research in education and the social science (Reeves, 1996). Principles underlying this paradigm consist of *"a belief in an objective reality, knowledge of which is only gained from meaningful data that can be directly experienced*

and verified between independent observers" (O'Brien, 1998: 6). Positivists believe that a separate, material reality exists apart from the beliefs of individuals, groups, or society. In addition, they believe that if anything exists, it can be measured (Reeves, 1996). This is obvious from the way positivists put high priority on mathematical analysis and statistical significance. In educational study, researchers adopting this paradigm have a tendency to be *"instrumentalists, reducing teachers and students to 'treatments' and 'objects' for research"* (Melrose, 1996: 50). Positivists adopt the assumptions that, *"only a scientific approach to education can ensure a rational solution to educational questions, and that only instrumental questions about educational means are amenable to scientific solution"* (Carr & Kemmis, 1986: 83). The emphasis on a scientific approach, as Cohen and Manion (1989: 19) say,

> *... has been elevated to an almost unassailable position ... Positivism's concern for control and, thereby, its appeal to the passivity of behaviourism and for instrumental reason is a serious danger to the more open-ended, creative, humanitarian aspects of social behaviour.*

Because the positivist paradigm has received numerous such criticisms, researchers in educational studies have begun to explore other paradigms which are able to accommodate and represent more appropriately their activities.

Interpretive paradigms or the *constructivist-hermeneutic-interpretivist-qualitative paradigm* has appeared in the social sciences as an alternative to overcome the constraints of positivism. Many researchers see the interpretivist paradigm as an option *"to replace the scientific notions of explanation, prediction and control, with the interpretive notions of explanation, meaning and*

notion" (Carr & Kemmis, 1986: 83). Researchers adopting the interpretive approach believe that truth is a matter of agreement among informed and sophisticated constructors, and not related to an objective reality. Guba and Lincoln (1989: 86) extend this idea arguing that the interpretive paradigm is characterised by *"a belief in a socially constructed, subjectively-based reality, one that is influenced by culture and history"*. Thus interpretivists stress the need *"to put analyses in context, presenting the interpretations of many, sometimes competing, groups interested in the outcomes of instruction"* (Reeves, 1996: 1). He adds that interpretivists emphasise the person as the main research instrument, rejecting the mathematical modelling of phenomena upon which the quantitative paradigm depends. With regard to research methodology, interpretivists tend to rely on anthropological methods of inquiry, especially human observation. This is understandable, since being engaged in the context of a research study is highly favoured over being isolated in the classical laboratory of the scientist (Reeves, 1996). It is true that human behaviour can only be understood through context. In educational study, researchers adopting this paradigm use *"their findings to inform the judgement and enlighten the practice of other educationalists as they turn develop educational processes which assist the self-actualisation of others"* (Melrose, 1996). In understanding the relation of researchers to the research act, however, both positivists and interpretivists share similar views. In these paradigms, researchers keep distance from the research context. *"Researchers stand outside the researched situation adopting a disinterested stance in which any explicit concerns with critically evaluating and changing the educational realities being analysed is rejected" (Carr & Kemmis,*

1986). "Researchers are passive collectors and expert interpreters of data" (O'Brien, 1998: 6).

Critical theory or *a critical theory-neomarxist-postmodern-praxis paradigm* is an alternative research paradigm which represents a *"desire to abandon the search for truth as sought by empiricists or understanding desired by interpretivists in favour of seeing little truths which are situationally appropriate"* (Reeves, 1996: 2). Critical theory has developed the Aristotelian idea of praxis in which *"personal theory and practice grow, develop and adapt in unison and are not artificially separated"* (Melrose, 1996: 52). Boland, (2001, cites Freire, 1994) to explain praxis as a means of validating claims of truths that should be understood as the movement of action and reflection leading to further action and reflection. Hence, researchers applying this paradigm exercise reflective practice since they develop on-going process of personal theory of their practice. Carr and Kemmis (1986: 149-150) believe that critical theory:

> *rejects the positivistic notion of rationality, objectivity and truth as historically and socially embedded, not as standing alone or outside history and the concerns of participants in real social situations. Moreover, it does not have a technical interest in problem solving, but sees the conduct of social science itself as an opportunity for emancipation of participants;*
>
> *depends upon the meanings and interpretations of practitioners: the terms in critical theorems must be grounded in the language and experience of a self-reflective community and meet the criteria of authenticity and communicability;*
>
> *institutes critical processes of self-reflection (the organisation of enlightenment) whose purpose is to distinguish ideas and interpretations which are ideologically or systematically distorted from those which are not, and distorted self-understanding from those which are undistorted;*

> *employs methods of critique to identify and expose those aspects of the social order over which participants have no control and which frustrate rational change, and both its critical theorems and its strategic organisation of action are directed at eliminating, or overcoming, constraints on rational change;*
>
> *is practical, being directed towards helping practitioners inform themselves about the actions they need to take to overcome their problems and eliminate their frustrations.*

Reeves (1996: 2) therefore, insists that critical theory should be *"taken seriously because it encourages instructional designers to question again and again the cultural, political, and gender assumptions underlying an instructional product or program"*.

3.2. Action research in the research paradigm

After describing these research paradigms, which each offers particular concepts and techniques for undertaking the research; the question is then, where to position action research within those three research paradigms? As AR aims to make improvement and change in the practitioners' situation, it does not fit into the positivist research paradigm. Positivists aim their research to observe, describe, interpret and explain events without making value judgements. From the characteristics and assumptions underlying the interpetivist research paradigm, in which researchers keep distance from the research context, AR does not fit with this paradigm, either. AR does not sit comfortably in either the *positivism* and interpetivist paradigm. Carr and Kemmis (1986: 180-181) distinguish AR from positivism and interpretivism as follows.

> *... action researchers cannot regard the 'object' of AR as determined, independent, external 'phenomena' ... because they recognise that their educational practices, understandings and situations are their own – that they are deeply implicated in creating and constituting them as educational. Nor do action researchers take a technical or instrumental view of the relationship between theory and practice...Neither can action researchers accept the interpretative view of educational practices, understandings and situations. Where positivists are inclined to reduce these things to physically descriptions of behaviour and the conditions which determine it, interpretivists are inclined to construe educational practices and situations solely as expressions of practitioners' intentions, perspectives, values and understandings, and thus fall prey to a rationalist's theory of action which suggest that ideas alone guide action, and that changed ideas can produce different social or educational action. The interpretive researcher aims to understand practices and situations by seeking their significance in the ideas of actors ... action researchers therefore reject the account of the relationship between theory and practice given by interpretive research because they reject the view that transformations of consciousness are sufficient to produce transformations of social reality.*

Similarly, McNiff (1988: 18) agrees that AR does not belong to either positivism or interpretivism as in the following comment.

> *Both the empiricist and the interpretive traditions are grounded in subjects other than educational practice. They do not allow for such questions as "How can I improve my class practice?" or "How can I account for my own educational development?" - first, because it is not part of their methodological design to ask such practical, problem-based questions, and second, because it is not part of their conceptual repertoire to answer them.*

Furthermore, Carr and Kemmis (1986: 179-180) suggest that AR

> *rejects positivist notions of rationality, objectivity and truth in favour of a dialectical view of rationality ... and* (Whitehead) *the interpretive categories of teachers by using them as the basis for "language framework" which teachers explore and develop in their own theorising.*

In adopting the view of truth, Carr and Kemmis (1986: 183) point out that, *"unlike interpretive researchers who aim to understand the significance of the past to the future, action researchers aim to transform the present to produce a different future"*. Contrasted to the philosophy of positivism *"which views truth as being objectively available through statistical survey and experimental methods as a means to produce valid quantifiable result, critical theory views truth as being socially constructed by people, as being praxis"* (Boland, 2001: 5). Hence, from this point of view AR most likely belongs to the research paradigm of critical theory or praxis paradigm. Praxis within AR, as suggested by Carr and Kemmis (1986: 191), is,

> *both a 'test' of the actor's understandings and commitments and the means by which these understandings and commitments can be critically developed. Since only the practitioner has access to the understandings and commitments which inform action in praxis, only the practitioner can study praxis. AR therefore cannot be other than research into one's own practice.*

Any action research study or project begins with one pattern of practices and understandings in one situation, and ends with another, in which some practices or elements of them are continuous through the improvement of process while others are discontinuous (Carr & Kemmis, 1986).

3.3. Action research methodology

Different paradigms lead to different methodology (Burrel & Morgan, 1979). But the most effective methodology should be able to generate data and interpretations appropriate to a given context (Dick, 1993). This study of teachers' perception on their involvement in AR could certainly be approached

by other methodology. Yet, AR was adopted in this study because it was considered to fit the context in which this study took place. There are at least five considerations underpinning my decision to adopt AR in this study.

The first justification was that it could be *responsive and flexible* to the situation that many other research methods cannot. Macintyre (2000: 7) emphasises that AR is flexible because *"it can respond to unforeseen circumstances"*. As I collaborated with teachers who were implementing AR in the classrooms, we were in the dynamic classroom situation in which control was inapplicable and unethical. Unlike most traditional research methodologies, which emphasises control and objectivity to obtain rigour, the AR methodology of a cyclic form of self-inquiry enabled the practitioners to develop and redevelop the research. Burns (2002: 7) highlights that AR,

> *allows for a systematic examination of the effects of teaching practice but at the same time can change direction in response to emerging needs, thus promoting teacher and learner satisfaction. Importantly, it can be self-managed by the teacher.*

Similarly, Dick (1993: 9) agrees that AR *"allows you to improve both action and research outcomes through a process of iteration"* .

The second justification for adopting AR in this study is because AR is distinctive from other approaches by being practical, participative and collaborative, emancipatory, interpretive, and critical (Zuber-Skerritt, 1996). Kemmis and McTaggart (1988: 7) suggest that,

> *AR can be seen as an approach for groups of educational practitioners, students' parents and others to live with the*

> *complexity of real experience, while at the same time, striving for concrete improvement.*

Whitehead (1989: 1) says that the prominence question that action researchers ask is *"How do I improve what I am doing"*. Hence, improvement was also another key word to justify the choice of the AR methodology as the two aims of AR are to *improve* and to *involve*. The *improvement* comprised three areas: 1) the improvement of practice; 2) the improvement of the understanding of practice by practitioners, and 3) the improvement of the situation in which the practice take place. The *involvement* comes along with the improvement, as participants are involved in all stages of AR planning, acting, observing, and reflecting (Grundy & Kemmis, 1988; Henry & Henry, 1988). The teachers who participated in this study devoted their time and energy and involved themselves in every stage of the research, starting from the initial study where they participated in AR workshops to gain AR knowledge and to improve their research skills; implementing AR in their classes, and introducing their research to other teachers through reports, posters, and a seminar. During the research, they kept diaries, and managed and evaluated their research over time through the AR cyclic system. Their involvement in the research aimed to answer research problems which in turn could improve their teaching practices.

The third justification of adopting AR in this study relates to change and learning which are claimed by Dick (1993) as the outcomes for teachers who take part in an AR study. The changes resulting from AR engagement are believed to be different from the changes resulting from other approaches of PD. These are mainly because of the three characteristics of AR, which are identified by

Altrichter, Posch, and Somekh (1993); Henry and Henry (1988) and summarised as follows.

1. AR involves collaboration;
2. The teachers proposing the AR set up a plan which can be implemented, monitored and reflected upon by participants. The plan should have an internal dynamic which propels one cycle of planning, acting, monitoring and reflecting into further cycles which build on emerging understanding;
3. The project should be of practical significance, and there should be a clear indication of the kinds of concrete benefits to teaching and learning that are anticipated

The fourth justification of adopting AR in this study is because AR typically involves small-scale investigation projects in the teacher's own classroom, and consists of a number of phases which often recur in cycles: planning, action, observation, and reflection (Richards & Lockhart., 1994). Teachers who engage in AR *initiate* the plan of *action* which could be implemented, *observe* the action itself as it is implemented in the actual situation and how the action affects the situation; and *reflect* on the action, the situation affected by the action, and on the strategic planning for further cycle. These processes which are self-reflective are carried out carefully, systematically and rigorously (Brown, Henry, Henry, & McTaggart, 1988). Thus, other central characteristics of AR are the enhancement of practice, the development of new understandings, and the introduction of *change* into the social enterprise (Burns, in press). In this respect, compared to the traditional methodology where teachers are the objects of the study, the role

of the teachers using AR methodology is more dominant. In addition, since the research addresses their own problems, teachers benefit from the findings immediately so that the contribution of the research to the improvement is without delay.

The fifth consideration to choose AR as the methodology in this study relates to the extent of involvement of the researcher in the research context. AR allows its researchers to have greater involvement in research. This will not be the case if I chose a methodology which adopt positivist or interpretivist paradigms. In these paradigms, researchers keep distance from the research context. In the case of this study, AR could accommodate:

- direct involvement for me in my research addressing issues arising in my practice as a TE and my role as a facilitator. In this study I have a direct involvement with the teachers to introduce AR, and to help and to support the teachers while they implemented AR in their classes.
- approaches which enabled me to do on-going reflection and adjustment in response to the development of the study which was complicated, unique, and unpredicted.
- approaches to interpret the teachers' perception, belief, and understanding of their practice.

Finally, the following table summarised by Zuber-Skerritt, O. (1992: 14) provides a working definition of AR to outline in which situation AR takes place.

Table 3.1. Working Definition of Action Research

If yours is a situation in which

- people reflect and improve (or develop) their *own* work and their own situation
- by tightly interlinking their reflection and action
- and also making their experience public not only to other participants but also to other persons interested in and concerned about the work and the situation, i.e. their (public) theories and practices of the work and the situation

and if yours is a situation in which there is increasingly

- data-gathering by participants themselves (or with the help of others) in relation to their own questions
- participation (in problem-posing and in answering questions) in decision-making
- power-sharing and the relative suspension of hierarchical ways of working towards industrial democracy
- collaboration among members of the group as a "critical community"
- self-reflection, self-evaluation and self-management by autonomous and responsible persons and groups
- learning progressively (and publicly) by doing and making mistakes in a "self-reflective spiral" of planning, acting, observing, reflecting, re-planning, etc.
- reflection which support the idea of the "(self-) reflective practitioner"

then yours is a situation in which ACTION RESEARCH is occurring.

Applying Table 3.1 to this study, it could be said that the situation presented in this table occurred in the study. In this study, teachers conducted research in their classrooms in order to improve the quality of teaching practices; teachers themselves collected data in relation to their research problems; teachers' involvement in their research was dominant in every stages of their research and; teachers conducted their research collaboratively with facilitators and their colleagues, as well. In conducting their research they benefited from AR flexible process which enabled them to evaluate and adjust through the process of planning, action, observation, reflection, and planning again for further action. Upon finishing the research, teachers disseminated their findings to other teachers through report writing, posters, and a seminar. These descriptions of the

study are similar with those in Table 3.1. Hence, it is undoubtedly justifiable to say that the methodology adopted in this study is AR.

3.4. Context of the study

To present the context of the study, this chapter discusses the teachers who participate in this study, and the group discussion for subject teachers that closely related to teacher PD. This chapter also discusses the steps taken through out the study, techniques and strategies of collecting and analysing data.

3.4.1. Teachers participating in the study

The study was conducted at seven high schools in Surakarta, Central Java, Indonesia from February - July 2002. In Surakarta there are eight public high schools (HS), 39 private HS, two public Islamic HS (Madrasah Aliyah), and four private Islamic HS. In this study I limited myself to researching the public HS only. The choice of public HS was based on careful considerations. Firstly, it allowed me to do comparisons across the same types of school. Secondly, there had been good relationship among the teachers, the principals and I. This avoided the need to begin the building up of good relationship with them which was very crucial for the research. Each understood each other's role. In addition, it was for pragmatic reasons as these HS were close to each other so that it took me about five to thirty minutes driving from one school to the other. It was convenience in accessing the schools that enabled me to visit more than two HS in one school day and interview the teachers there.

This research involved ten English teachers from seven HSs: HS 1, HS 2, HS 4, HS 5, HS 6, HS 7 and HS 8.

HS 3 did not join the study because the English teacher who initially wanted to participate in the research went to Mecca to undertake the pilgrimage. One teacher represented each school, except for two teachers from HS 7 and three teachers from HS 8. Initially I wanted to invite one teacher from each HS, but things turned out differently in the field. The principals of HS 7 and HS 8 suggested involving more teachers in the study since they believed the study benefited the teachers. The teachers who participated in the study comprised seven females and three males. They had various backgrounds and experiences in teaching English. Table 3.2 shows the profile of the teachers participating in the study.

Table 3.2. Profile of Teachers Participating in the Research

Name, Gender, Age, teaching in the current HS	**Teaching Experiences**	**Academic qualification**	**Type of class,**	**Class used for AR Focus of Teaching**
Teacher A Female/43 years 3 years	16 years	Undergraduate degree	Year 2: 4 classes	Class II.4 Speaking
Teacher B Female/37 years 3 years	12 years	Undergraduate degree	Year 2: 5 classes	Class II.4 Reading
Teacher C Female/54 years 23 years	25 years	Undergraduate degree	• Year 1: 9 classes • Year 2: 6 classes • Year 1 special: 3 classes	Class ID Oral Skills
Teacher D Female/42 years 18 years	22 years	Undergraduate degree	Year 2: 5 classes	Class II A Speaking
Teacher E Male/40 years 2 years	15 years	Undergraduate degree	Year 1: 4 classes	Class I.2 Reading

Teacher F Female/49 years 13 years	20 years	Undergraduate degree	Year 3: 3 classes	Class III Sociology 4 Reading
Teacher G Female/49 years 13 years	24 years	Undergraduate degree	Year 2: 4 classes Year 3: 4 classes	Class III Sociology 3 Structures
Teacher H Female/34 years 5 years	10 years	Undergraduate degree	Year 3: 4 classes Year 2: 6 classes	Class III Sociology 4 Reading
Teacher H Male/33 years 2 years	7 years	Undergraduate degree	Year 1: 6 classes	Class I.2 Reading
Teacher I Male/43 years 3 years	19 years	Undergraduate degree	Year 3: 5 classes	Class II Physics 1 Reading

Each teacher held an undergraduate degree. All the teachers graduated from the English Department of different universities. Seven of them were graduates of teacher education faculties, whereas the other three teachers graduated from the Faculty of Letters. The teachers were between 33 - 54 year old and had been teaching for 7 - 25 years, including the length of teaching in their current HSs. Among them, *Teacher C* who was the oldest had the heaviest working load. In one week she taught 15 regular classes: all nine classes of year 1; six classes of year 2. Altogether this took 25 hours of class meetings (25 x 45 minutes). In addition, for the third term she also had to teach three special classes of year 1. The special classes were conducted at 6.30 – 7.15 a.m., whereas the regular classes started at 7.15 a.m. The special hour class was intended to give students English skills that were not covered in the official syllabus. Besides that, she had other duties as well, both regularly and incidentally, such as language laboratory supervisor, graduation day treasurer, program co-ordinator of national events,

etc. Her experience dealing with English spanned beyond teaching since she also had worked as an interpreter before she became a teacher.

3.4.2. Forum of discussion for subject teachers

Most HS teachers in Indonesian have a kind of discussion forum based on the subjects they teach, such as English teachers, Mathematics teachers, etc. The discussion forum which is called Musyawarah Guru Mata Pelajaran or known as MGMP has one day off each week for teachers' professional day. On each professional day, Tuesday is the English MGMP day, teachers are not obliged to teach. On Tuesday, usually the English MGMP conducts meeting and some activities to promote PD. However this activity is highly dependent on government funds. Nowadays, since the MGMP does not receive as much fund, in one semester the English MGMP can only hold about two meetings, conducted at the beginning and towards the end of the semester. With the limited budget, the English MGMP can hardly run seminars and invite external speakers. In the meeting teachers usually discuss and write test items and lesson plans. Sometimes they discuss teaching approaches and techniques. From the data I found out that if the English MGMP did not hold any meeting, English teachers stayed at home completing school works, such as doing correction, and preparing lesson material. Other teachers spent their time doing house chores or minding their children. One teacher, *Teacher C* told me, "*Tuesday was the only day I could cook real meals for my family*".

In conducting the research, I worked together with the committee members of the English MGMP in selecting and approaching the teachers who participated in the study. They helped me with administrative work such as sending invitations, arranging and organising the place to run the AR workshops, the fortnightly group discussions, the poster presentation, and the seminar.

3.4.3. Steps in the action research project process

This section discusses the steps conducted in this study. These steps included preparation, such as obtaining consent letters from the principals and the teachers; collecting background information through the questionnaires and interviews, the AR workshops, and the implementation of AR. The stages of the study are summarised in Table 3.3 as follows.

Table 3.3. The Time Frame and Structures of the Action Research Study

Time frame (2002)	Structure/ Focus	Programs
2 weeks 1–17 Feb	Preparation	To introduce the research plan, make contacts, and obtain consents from the teachers and the principals.
1 week 7-14 Feb	Background information	To gain preliminary information on the teachers' perceptions about PD and their prior knowledge of AR.
1 day 19 Feb	Workshop 1	For further details of the AR workshops, see Table 4.4. and section 4.3.1.
1 week	Follow up activities by teachers	
1 day 26 Feb	Workshop 2	
1 week	Follow up activities by teachers	
1 day 5 March	Workshop 3	
1 week	Follow up activities by teachers	
1 day 12 March	Workshop 4	
1 week	Follow up activities by teachers	
1 week:17-24 March	School break	
14 weeks 25March–29June Implementation of AR by teachers in their classes	W1: Start AR projects	For further details of the implementation of AR, see Table 4.5. and section 4.3.2.
	W3: Group discussion 1	
	W5: Group discussion 2	
	W7: Group discussion 3	
	W9: Group discussion 4	
	W12: Complete AR reports	
	W13: Complete posters and papers	
	W14: Poster presentation and seminar	
2 weeks: 1-14 July	School break	
1 week: 26–31July	Back-to-school study	To investigate the impacts of AR to teaching.

As shown in Table 3.3, some time before having teachers participate in my study, I had informal contact with most of them in the preparation stage. Several teachers said that they were happy to participate in the research as long as I provided facilitation and support all the way through. For example *Teacher G* stated, *"I really don't mind to help you as long as I can do it. Otherwise, you have to show me how to do it..."*; and *Teacher I* asked, *"... but will you be available when I need you?"* To have a concrete picture about their perception of PD and AR, data about their perceptions were collected through questionnaires. To gain more detailed data, interviews with the teachers were also undertaken. The data collected from the questionnaires and the interviews were anticipated would be important as background information to conduct further steps of the study. The descriptions of the major stages are presented in the following sections.

3.4.3.1. Background information

In this initial step, two sets of questionnaire were distributed to obtain two kinds of data. The first questionnaire which was adapted from Cook (1991) (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 questionnaires were followed by interviews to the teachers. It was meant to obtain further details of these data. 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 next stage, especially the AR workshops. Further discussion about the results

of the questionnaires and the interviews about teachers' perceptions of PD is presented in section 4.2.1.

From questionnaires and interviews I concluded that most teachers in this study had not been familiar with AR. Six teachers had never heard about AR. Two teachers: *Teacher F*, *Teacher G* had heard about AR from a seminar conducted by the English MGMP, but they had never conducted AR research before. The other two teachers: *Teacher H* and *Teacher I* had heard and also conducted AR projects before participating in this study. *Teacher H* had conducted AR in her class with some university staff which investigated supervision to new teachers. On the other hand, *Teacher I* mentioned he had conducted AR when he was teaching in the previous school before he worked in his current HS and was supervised by a senior teacher from his school. Further discussion about these four teachers' prior knowledge of AR is presented in section 4.2.2.

3.4.3.2. Action research workshops

In order that all the teachers shared the same platform as a starting point for AR, a series of workshops on AR were held at the beginning of the study. The AR workshops which was run with a colleague of mine, *Colleague K*, were held every Tuesday in which English teachers did not teach, as it was the English MGMP day. Table 3.3 shows that the workshops were conducted four times. Initially the workshop program was designed for eight meetings, twice a week

for four weeks. However, due to the school's tight schedule in preparing the end-of-school-term examination, there was an alteration of the program: from eight into four meetings, once a week for four weeks. Therefore it needed careful consideration to prepare the workshop contents and activities, because in only four meetings the workshops were meant to provide teachers with appropriate knowledge and skills to conduct AR. To compensate for this, as illustrated in Table 3.3, each workshop was followed by activities that were conducted by the teachers to elaborate the previous workshop. Their activities were then reviewed and discussed in the workshop that came after. Further discussion about the AR workshops is presented in section 4.3.1.

3.4.3.3. Implementing action research

The AR workshop program was conducted to provide teachers with knowledge and skills to undertake AR. To refine their knowledge teachers discussed selected readings of AR. They also analysed samples and models of AR conducted by other teachers. Furthermore, they were asked to write an AR proposal to ascertain their understanding of AR, especially the process and stages in AR, and collecting and analysing data. Based on the proposal the teachers conducted AR in their classes. The research as shown in Table 3.3. above was done during the third school term that lasted for 14 weeks. The topics investigated in AR covered improving teaching practices and overcoming problems in the class. Table 3.4. in the following table shows the research topics that the teachers decided to conduct.

Table 3.4. Research Topics Investigated by the Teachers

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

From the topics as summarised in Table 3.4 above, it could be said that most teachers interested in the topics of learning rather that teaching. Further discussion about topics that the teachers decided to conduct is presented in section 4.3.2.2.

To develop the reflective practice, the teachers were asked to write a diary. Diary writing was chosen among other techniques for promoting reflective practice (Bailey & David, 1996; Nunan, 2001) because relatively it did not need extra equipment such as in audiotaping lessons. The teachers were asked to write it immediately after their classes or at least on the same day of their teaching. Isakson and Boody (1993: 29) said that,

> *Although researchers develop the ability to remember vividly details of classroom situations, recording observations as soon as possible is essential because this provides quality primary data for later reflection. Waiting too long causes details to be lost or changed or covered over by feelings and reactions.*

Teachers were also asked to write as many events in their teaching as possible which then were analysed critically. Teachers needed to ask themselves

questions concerning reasons of choosing a technique or materials in their teaching, and possibilities to improve their techniques. From this process of reflective practice it was anticipated that the teachers developed the skills which enabled them to evaluate their practice. These skills in turned helped them to decide and modify actions needed in the next research cycles in the AR.

During the period of AR, once a week I visited the schools and interviewed the teachers individually. Teachers consulted about the difficulties and shared information about good programs in the AR project.

Fortnightly, there were regular group meetings. Each teacher reported orally on the progress of his or her research project which was then discussed by all teachers. These meetings were reported as helpful by all teachers in this study. Some of them said that they gained new insights, fresh ideas, and solutions to the problems they encountered which facilitated them to continue their AR projects. As each teacher was asked to produce a research report, these meetings were also used to prepare, develop and support the teachers' report writing. Further discussion about the whole process of the implementation of AR is presented in section 4.3.2.

On finishing the project, teachers presented their studies in a poster display and delivered a paper in a seminar held in HS 6. All teachers, except *Teacher B* who accompanied her students for an excursion, had their turns to speak in the seminar which was divided into three sessions. In the first session, *Teacher A*, *Teacher C* and *Teacher E* delivered the results of their research. 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. The second session which aimed at providing illustrations about the individual process of undertaking the research was done by *Teacher D, Teacher H* and *Teacher I.* The third session of the seminar which aimed to provide the audience with illustrations of the teachers' responses to conducting AR was conducted by *Teacher F, Teacher G* and *Teacher J.*

Besides the seminar, the teacher' works were also presented in a poster presentation. These posters were displayed before the seminar began in order to provide the audience with information about the AR projects before they engaged themselves in the seminar. The seminar and poster presentations which were held at the end of the school term before the school breaks were meant to publicise the teachers' projects on a wider scale, and to encourage the teachers to speak about their research so that they would get more used to speaking in larger academic forums. In addition the poster presentation also aimed to provide teachers with the experience that presenting research could be done in a simple and fun way. Further discussions about the seminar and the poster presentation are presented in sections 4.4.1.2. and 4.4.1.3.

The whole AR projects including the poster presentation and the seminar finished at the end the third term which was followed by two-week break. Two weeks after the breaks, I went to see the teachers in each HS to investigate the impact of AR on teachers after the implementation phase. This 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 questionnaires that were adapted from Nunan (1992b: 8). This 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 questionnaires were followed by in-depth interviews. Further discussion about the back-to-school study is presented in. section 4.4.2.

3.5. Data collection

Some techniques of qualitative data collection may be used in AR projects (Burns, 1999; Macintyre, 2000; McNiff, 1988). The data which were collected in this study comprised information on the teachers' perceptions towards PD and AR, the teachers and researcher's experiences and insights in conducting AR, and the teachers' views on how their involvement in AR enhanced their PD. To gain these data, the following qualitative research techniques: questionnaires, interviews, diary/journal, and document analysis were applied in this study. To provide more accurate data, each interview was audiotaped. Audiotaping was also conducted when teachers conducted fortnightly discussions during the time they participated in the AR workshops. The application of the techniques of data collection through out this study is summarised in Table 3.5 as follows.

Table 3.5. Techniques of Collecting Data

Steps of the study		Participants	Techniques	Data
Preparation		• Teachers • Principals • Researcher	Researcher's journal	Researcher's journal
Background information		• Teachers • Researcher	• Questionnaires • Interviews	• Result of questionnaires • Transcripts of interviews
Workshop 1 Follow up activities Workshop 2 Follow up activities Workshop 3 Follow up activities Workshop 4 Follow up activities		• Teachers • Researcher • *Colleague K*	• Teachers' diaries • Researcher's journal • Interviews • Document analysis	• Copies of teachers' diaries • Researcher's journal • Transcripts of interviews • Copies of workshops materials, teachers' proposals
School break				
Implementation of AR in the classrooms	W1: To start AR W3: Group discussion 1 W5: Group discussion 2 W7: Group discussion 3 W9: Group discussion 4	• Teachers • Researcher	• Teachers' diaries • Researcher's journal • Interviews • Document analysis	• Copies of teachers' diaries • Researcher's journal • Transcripts of interviews • Copies of lesson plans, lessons tasks, and students' answering sheets
	W12: Complete AR reports			• Copies of teachers' reports • Researcher's journal
	W13: Complete posters and papers			• Copies teachers' posters • Copies teachers' papers • Researcher's journal
	W14: Poster presentation and seminar	• Teachers • Researcher • Audience		Researcher's journal
School break				
Back-to-school study		• Teachers • Researcher	• Questionnaires • Interviews	• Result of questionnaires • Transcripts of interviews • Researcher's journal

The techniques of collecting data as shown in Table 3.5 are described as follows. *Questionnaires.* The questionnaires were distributed to the teachers twice, at the initial part of the study and at the post study. In the initial part of the study, the teachers completed two sets of questionnaires to obtain their perceptions of teacher PD and their prior knowledge of AR. Upon finishing their AR projects and after two weeks teaching in new classes, teachers were asked to complete questionnaires. At this post-study, the questionnaires were aimed to obtain their

perception of the effects of AR on the teachers. It included their perceptions of the impacts of AR on teaching, and whether they continued adopting AR approach in their teaching. All of the questionnaires in this study were followed by interviews. This was meant to obtain further detailed data.

Interviews. Table 3.5 shows that the interviews were conducted with the teachers in four stages. The first stage was before conducting the AR workshops and aimed to gain more detailed information of their perceptions of PD and their prior knowledge of AR. The second stage was during the AR workshops. Next stage was during the implementation of AR, during which I weekly went to HSs and interviewed the teachers. In addition, interviews during this stage also occurred after group discussions. These interviews aimed to gain information on their responses during conducting AR projects, problems they encountered, and achievements in the process of carrying out AR. The last stage was two weeks after the break when teachers taught in their new classes. My aim was to obtain further detailed data about their perceptions of the impacts of AR after their projects.

Interviews were also conducted to some secondary participants who were considered important to support the study. These included some HS principals whose teachers participated in this study, the chairman of the English MGMP, three English teachers who had finished their continuing study in the English Department and returned to their schools, and Professor Surachmad who used to be the rector of the Institute of Teacher Training and Education, Jakarta, Indonesia. The interviews to the principals and the chairman of the English

MGMP aimed to obtain data about teachers PD and their insights about how their PD activities were carried out. The interviews to the English teachers who had finished their undergraduate studies in the English Department and returned to their schools aimed to have data about the impacts of AR that they studied before and the implementation of AR in their teaching. Professor Surachmad published several books and articles which showed his concerns to education in Indonesia. In addition, as a used-to-be Rector of a prominence teacher education in Indonesia, his commitment on teacher growth was unquestionable. This study gained benefits from his participation as a speaker on a conference in Brisbane in 2001, since I had an easier opportunity to interview him in Brisbane rather than in Jakarta. The interview with him aimed to obtain his insights about teacher PD in Indonesia, and especially about the factors which were considered hindering and enhancing teachers' PD. Audiotaping was conducted in all stages of interviews with the teachers and the secondary participants in order to obtain accurate data. In addition, all the interviews were conducted in the Indonesian language, as it was anticipated that using this language would obtain more rich data rather than if they were conducted in English.

Diary/journal. Keeping a diary or journal was very important in this AR study. The aims were to document and communicate processes of the research, responses about the processes. Keeping diaries/journals was often said as involving reflection. On the part of the teachers, the diaries allowed them to record the process of their teaching, to think critically about the rationale of their teaching, to examine the effects of the research actions in their classes, to

anticipate further action in their research, and responses about difficulties they encountered during the research. Teachers were encouraged to asked reflective questions to themselves about their teaching during the AR projects. These included questions such as: Why did I take this technique for the lesson? What worked and did not work on this technique? How could I improve my lessons? What did I know about each of my student? What support could I provide? Isakson and Boody (1993: 30) say how these kinds of question which led teachers to engage in the reflective thinking could promote learning for teachers, "*These questions help me explore my assumptions about teaching, learning, students, and content. I become a learner in my own classroom by reflecting on what I believe and why I do what I do*". Each teacher' diary was then reviewed with the researcher to clarify and gain more insights about the perceptions from each of them. The process of reviewing was audio-taped in order to obtain accurate data.

The benefits that the teachers obtained from keeping diaries also occurred to the researcher who, as shown in Table 3.5, kept journal from the beginning and throughout the study. However, it more related to the capacity as the researcher who was also as the facilitator in this study. Besides, as a technique of collecting data, keeping journal also beneficial to explore and analyse what happened in the study which allowed me to evaluate and decide suitable strategies to facilitate and support the teachers.

Document analysis. As illustrated in Table 3.5, document analysis was also used in this study. It aimed to complement and support the other data in the study.

Documents, such as lesson plans, student achievement records, student attendance list, and student answering sheets, were collected from the teachers. Included in the documents were the materials presented during the AR workshops, teachers' proposals, posters, and papers for the seminar.

3.6. Data analysis

McNiff (1988: 85) suggests that analysing data has,

> *to do with making sense of what is going on in real life. Making sense means deciding on what could be termed 'sense' in the first place, explaining why this rather than other actions are termed 'sense', and suggesting how the educative action in question approximates to the sense.*

In AR which is reflexive in nature, analysing data is conducted while collecting them, *" over the entire investigation"* (Burns, 1999: 156). During collecting data, Anderson, Herr, and Nihlen (1994) state the researcher to carry out ongoing analysis and reflection at various intervals. At these intervals, they suggest to check whether the research questions still seem answerable and worth asking, and whether the techniques adopted are really collecting the data needed (Anderson et al., 1994).

Similarly, Glesne and Peshkin (1992) insist that data analysis that is carried out at the same time with data collection enables researchers to focus and control the study as it develops. For this reason, they suggest consistent reflection, organisation, and discovery of what the data reveal (Glesne & Peshkin, 1992). Sagor (1992: 48) suggests that,

> *Data analysis can be most simply described as a process of sifting, sorting, discarding, and cataloguing in an attempt to answer two basic questions: What are the important themes in this data? and How much data support each of these themes?*

In answering these questions and bringing about some kinds of sense of the data Burns (1999: 155) says that it can be conducted by, *"identifying broad trends, characteristics or features across event or a series of events"*. She recommends several steps to be taken during the process of analysing data, such as assembling the data, coding the data, comparing the data, and building interpretations (Burns, 1999).

In investigating the teachers' perceptions about their involvement in AR to their PD enhancement, this study collected the following groups of data: researcher's journal, transcripts of interviews, copies of teachers' diaries; result of questionnaires; and documents which included copies of lesson plans, students' answering sheets, copies of teachers' posters, and copies of teachers' papers, and materials for the AR workshops. These data were analysed as follows.

Researcher's journal, transcripts of interviews, copies of teachers' diaries. While reread the researcher's journal, transcripts of interviews, and teachers' diaries, I made some notes in the margins of the text. In order to be able to become familiar with the insights from these data, the process of reread was conducted more that once. In particular, rereading the transcripts of the interviews and teachers' diaries was combined with relistening the cassette of these data. This helped me to re-experience the atmosphere which could not entirely be captured from reading the text only. I found out that re-experiencing

the atmosphere when the data were collected was important for two reasons. First, it enabled me to see if there were themes or ideas that I missed from the previous reading. Second, it provided richer information for the importance of identifying general themes or ideas, and interpreting them. In addition, the findings through these processes were cross-checked with the comments about these data in the researcher's journal. For example, when I red the interview transcripts of *Teacher E* and listened to the tape of that interview, I also red my notes or insights recorded in my journal about that interview.

There was a great amount of data collected in this study. Firstly I made notes which seemed relevance to this study. However, after several times re-red and examined the text I compared and looked for patterns which inter-played in the data. Referring to answer the research questions (see section 1. 3) and literature reviews in identifying the patterns gave me concepts and perspective which helped me to stay focus. However certain ideas might occur several times, although they did not answer any of the research questions. These unexpected themes which emerged during this process were also coded and filed as additional findings of the research. The themes were labelled through major themes which were further broken down into minor ones. Table 3.6 in the following exemplifies some of the themes.

Table 3.6. Examples of Themes Emerging from Data Analysis

Major themes	**Minor themes**
Perceptions of PD	The nature of PD The contents of PD Decision makers of PD Teachers plan of PD Difficulties in participating in PD

	Teachers participation in PD Evaluation of PD
AR workshops	Original plan Adjustment Steps of running the workshops Teachers' positive responses of the workshops Teachers' negative responses of the workshops Constrains in running the workshops Difficulties encountered by the teachers Supports needed by the teachers

The next step was to take out sentences or utterances produced by the participants and filed together under each theme. This step enabled me to compare each sentence under each theme and saw a broader picture of the themes. Citations from the participants' real utterances, sentences written in teachers' diaries, or from my own journals were originally spoken or written in the Indonesian language. In this step, they were translated into English. Table 3.7. shows an example of sentences/utterances which were taken out from the text and categorised into one theme.

Table 3.7. Examples of Data Classified under a Theme

Theme: Benefits of AR for students	**Coding**
My observation shows that the students are happy to have more opportunity to speak as the lesson was conducted in group. That they were free to develop the topic of conversation also encourage their active participation, since the students can talk the topic they liked.	A.4/2
Even the quietest student now show their active participation the lessons.	B.5/7
The students are very enthusiastic to practice English. This was not happened before.	C.4/1
Brainstorming makes my students become more focus to the reading. They understand reading better, as they can do the tasks easier.	D.3.3
I observed that the students were freer to express their opinions, less stressed and more fun in the class. I think they liked English and enjoyed it	E.5/3
Yesterday my students challenged me to practise English in the tourist sites. They said, "Sir, let's use the language with tourists. It is time to practice English and not study only"	E.6/2
The increase of the achievement test is not really obvious, but I can see the different in the class. Unlike before this [AR] project, now the students look to have more understanding of what a main idea of a paragraph is.	F.5/2

I was very concerned with the apparent cheating from the students. However, with my increasing efforts to make them learn better, and the sudden test to them reduced their tendency to count on other students in doing the tests.	G.5/5
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.	H.5/1
The students' achievement in the previous test increase to 200%. It was not only me who were happy, the students looked happy too with this.	I.6/2
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".	I.6/4

The presentation of data classified under each theme provided a more concrete database of findings. However, the database of findings still needed further reviewing and examination before finally presented in the chapter of the thesis. Reviewing this database of findings allowed me to reduce and select the findings which were significant to the study. After that, the next step was to write the findings and presented in theses.

Result of questionnaires. The results of the questionnaires were analysed through the following steps. First, after red and rered the results, the responses from the teachers were grouped under each question in the questionnaires. Sometimes because the teachers' responses showed diversity of opinions, it needed a further regrouping. After that, they were tallied to see the frequencies of the appearance.

The next step was to summarise the responses under each question to show various themes that emerged in each questions. In interpreting the findings, the researcher needed to conduct interviews to obtain more detailed information. The findings from the analysis of the questionnaires were then cross-checked with the findings from the interviews. Through the combination of data collection and

analysis, it was anticipated that the study obtained an appropriate trustworthiness of research.

Analysis documents. Documents collected in this study included copies of lesson plans, students' answering sheets, copies of teacher training materials, copies of teachers' posters, and copies of teachers' papers, and materials for the AR workshops. The documents were carefully examined. They provided additional data and at the same time can be use as a crosscheck of other data in this study. For example, examining the copies of material taken from training attended by *Teacher E* in the provincial level confirmed his complaint that he did not find anything new from this PD program. The documents showed that the materials presented ion the training was not less different from what he obtained in the English MGMP meeting. Another example was students' comments written in the test answer sheets provided evidence about the improvement reported by *Teacher E* in his class, because the comments showed some compliments to this teacher.

3.7. Summary

This section has presented an overview related to the methodological aspects of the study. Started with the description that traced the various research paradigms used in educational research. Then, it located AR in these paradigms, and presented arguments for the choice of using AR as a methodological approach in this study. This chapter also detailed the participants in this study, identified the

techniques of analysing data applied in the study, and described the process of analysing data.

The results of data analysis will be presented in two chapters. Chapter four will provide the general findings of the study which were described in a framework for three main stages *the inputs, the processes,* and *the products* of teachers' AR. Chapter five aims to present findings in more depth. It focuses on the case studies of four teachers in carrying out the individual journey of conducting their AR projects.