

People's Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
University Abderrahmane Mira of Bejaia
Faculty of Arts and Languages
Department of English

***Adopting Action Research Method in Teacher
Training to Promote Student Teachers' Reflective
Thinking***

**Case study: Second Year, Master Students of Didactics at the Department of
English at the University of Bejaia**

**A dissertation submitted in partial fulfillment for the requirement of the Master degree
in Didactics of English**

Submitted by:

Miss. Samia Maafa

Board of the Jury:

Chair: Chafa Ouali

Supervisor: Mrs. Sonia Yahmi-Imerzoukene

Examiner 01: Dr. Nadia Ahouari-Idri

Examiner 02: Mr. Belkacem Outremzabet

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Dedication

Every challenging work needs self efforts as well as encouragement of elders

especially those who are very close to our hearts

My humble effort, I dedicate to my sweet and loving

“Father and Mother”

Whose affection, love, encouragement and prayers of day and night make me able to

get such success and honor

Along with all hard working and respected

Teachers

To my brother and sisters, my loving friends and classmates

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First praise is to Allah, the Almighty, on whom ultimately we depend for sustenance and guidance.

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Abstract

The present study investigates the effectiveness of adopting action research method to promote student teachers' reflective thinking in teacher education and training. The participants are second year Master students of Didactics at the University of Bejaia. To carry out the research, a pre-experimental design is adopted. The experimental group receives treatment during two months. They adopted the action research method in their teacher training. To collect data, qualitative and quantitative data collection instruments are used. For qualitative data, we used focus group to evaluate the progress of the experiment, and diaries as an alternative to observation. For quantitative data, we started by a pilot questionnaire to confirm the existence of the problem, and a scale for reflective thinking to test the student teachers' improvements after the treatment. The results indicate that the student teachers promoted their reflection on their teaching after the adoption of action research method. Several limitations faced during the research; some implications and suggestions for further research are presented at the end of this research paper.

Keywords: Teacher Education, Training, Action Research, Reflective Thinking.

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List of Abbreviations

EFL: English as a Foreign Language.

ELT: English Language Teaching.

LMD: Licence, Master, Doctorate.

RTTS: Reflective Thinking Tendency Scale.

SPSS: the Statistical Package for Social Sciences.

Glossary of Terms

For better understanding, a list of the most important concepts in our research is defined below:

Action Research: according to Frost (2002), action research is “*a process of systemic reflection, enquiry and action carried out by individuals about their own professional Practice*” (As cited in Costello, 2007, p. 03). Another definition was proposed by Burns (2010). He defined AR as “*part of broad movement that has been going on in education generally for some time. It’s related to the ideas of “reflective practice” and “the teacher as researcher”*” (Burns, 2010, p. 02).

The Longman dictionary claims that action research “*In teacher education, it’s a teacher-initiated classroom research that seeks to increase the teacher’s understanding of classroom teaching and learning and to bring about improvements in classroom practices*” (Richard & Schmidt, 2010, p. 08).

Co-operative Teacher (Master Teacher, Trainer and Supervisor): in teacher education it refers to “*an experienced teacher in whose class a student teacher does his or her practice teaching. The role of the co-operating teacher is to help the student teacher acquire teaching skills and to give feedback on his or her teaching*” (Richard & Schmidt, 2010, p.134).

Practice Teaching (Teaching Practice, Practicum, Student Teaching): it is defined as “*Opportunities provided for a student teacher to gain teacher experience, usually through working with the experienced teacher for a period of time by teaching that teacher’s class*” (Richard & Schmidt, 2010, p. 589).

Reflective Teaching: it’s defined as “*approach to teaching and to teacher education which is based on the assumption that teachers can improve their understanding of teaching and the quality of their own teaching by reflecting critically on their teaching experiences*” (Richard & Schmidt, 2010, p. 491).

Reflective Thinking: Antonietti, Confalonieri, & Marchetti (2014: 03) proposed the following definition for reflective thinking:

Reflective thinking can mean three different things: a first form of reflective thinking consists of elaborating personal conceptions about the mental activities and abilities and becoming aware of what occurs in our and other

people's minds when we are engaged in intellectual tasks. A second meaning of "reflective thought" regards theory of mind, which concerns more closely the realm of social interaction and relationship. The third kind takes the kind of narration. Individuals reflect on their own and other's mental lives by trying to make sense of what happen within and around them. (P. 03)

To sum up, reflective thinking has three distinctive definitions. The first one concerned with elaborating ideas and conceptions about own and other minds and way of thinking. The second one is thinking in relation to society and interaction. The last one takes the kind of narration.

Student Teacher (Trainee Teacher): according to Ravitch (2007, p. 206) *"it's a teacher in training in a teacher education program. Student teachers practice teaching under the supervision of regular classroom teachers"*.

Supervision: it's defined by Richard & Schmidt (2010, p. 573) as *"the monitoring and evaluation of the student teacher's teaching performance by a supervisor. Current approaches to supervision differ with respect to whether the supervisor's primary role is seen to be as an evaluator of teaching performance or a facilitator or consultant"*.

Teaching: McIntyre (2005, p. 124) defined teaching as the following *"teaching is acting so as deliberately and directly facilitate learning"* So, teaching is a process that involves action in order to facilitate learning.

Teacher Training/ Teacher Education: According to the Longman Dictionary of Language Teaching and Applied Linguistics (2010, p. 578), *"it is the field of the study which deals with the preparation and the professional development of teachers. Within the field of teacher education, a distinction is sometimes made between teacher training and teacher development."*

Introduction:

What makes a good Teacher? Is the question that has inspired and challenged many philosophers, educators, researchers and policy makers for many centuries (Calderhead & Shorrock, 1997). Educational writers and researchers have variously identified different aspects of the teaching roles; accordingly, an effective teacher education program should be designed for student teachers in order to prepare them for effectively performing their roles.

I. Sources of Inspiration

The Department of English language at the University of Bejaia provides both the students of Licence and Master Degrees with the opportunity to do teacher training at the end of the course. This opportunity is given in order to help the students build up their teaching skills and overcome the sundry teaching difficulties. Experiencing teaching in real setting with supportive guidance and evaluation is an advantage for the learners to scaffold themselves both affectively and cognitively. One of the qualities they could develop is their reflection on their future teaching. However, when we conducted our teacher training in our third year, we did not benefit from the experience as we had expected. This is due to some limitations and difficulties faced during all the process. The training process was conducted in a very short period of time that did not exceed thirty days. The student trainees were not taught about the different phases that should be followed in the process and found themselves in a muddled situation. No distinct program was given to the students to be followed and no guidance was received during the process. Indeed, several difficulties were faced; this turned the advantage of this process into the reverse. Subsequently, such a critical situation is worth investigating. Taking the benefit from this process to prepare the students reflect on their teaching is fundamental. Action research is closely linked, by many writers, with the concept of 'Reflective Practice' (Somekh & Lewin, 2005). For this, we suggested the implementation of action research method with its systematic steps in the teacher training courses to give it a sense of organization. In fact, neither teacher training, nor action research and reflective thinking were investigated before at the University of Bejaia. Hence, the critical situation of teacher training courses, the importance of action research, and the complexity of reflective thinking inspire us to carry out this study to explore the relationship between these three variables. Thus we hope bring change to the Algerian teacher training programs, mainly at the University of Bejaia.

II. Statement of the Problem

Teaching is an incredibly rewarding profession, but also a very hard work (Whitaker, 2012). A teacher is expected to act several roles; he is responsible for the entire class and he should inspire, lead and motivate his students (Jain, 2013). Therefore, the need for a well planned and effectively executed program of teacher preparation is considered essential before the teacher is launched at schools and given the charge of shaping the lives of thousands of learners during his professional career (Rajput & Walia, 2002).

Over the two passed decades, an increasing level of attention has been paid to teacher education; questions about how teachers are best trained for their work have been raised (Calderhead & Shorrock, 1997). According to Skinner (2005), there are several kinds of teacher training courses, but they all have a great deal in common. All teachers and student teachers in training need to find out about how to succeed in teaching and need to learn how to meet the nationally determined standards of professional knowledge, understandings and skills.

Action research is among the teacher training methods. As a systematic approach to improve teaching practices in a school setting (Pelton, 2010), it can be a very valuable way to extend STs' teaching skills and gain more understanding of themselves as teachers, their classrooms and their students (Burns, 2010). It encourages them to take control of their own professional development by being active and reflective (Sangha, Dance & Yoga, 2006). Therefore, building reflective teachers is one of the intended results that is expected to be reached through the application of action research method by the teachers and student teachers.

Since McGill (1998) argued that reflective practice should be seen as a core element of teachers' work, and Parker (1997) puts that action research enables student teachers to reflect on their teaching (As cited in Norton, 2009, p. 23), the central issue of this research is to investigate the effectiveness of action research method for student teachers to promote their reflective thinking. In other words, we are interested in exploring the effects of implementing AR method in teacher training courses to promote student teachers' reflective thinking.

III. Research Questions

To carry out this research the following questions are raised:

1. Does action research method have an effect on promoting Student teachers' reflective thinking in teacher training?
2. In which way does action research method contribute to promote student teachers' reflective thinking?
3. To which extent action research can be helpful for student teachers to promote their reflective thinking?

IV. Research Hypothesis

Reflective Teaching is considered as a crucial quality that needs to be developed in each teacher and student teacher (Richards & Lockhart, 1996). Promoting student teachers' reflective thinking requires a practical approach that should be applied in the teacher training course. We relate student teachers' reflective thinking to the application of the action research method in the training course. Thus, we are interested in investigating the effectiveness of action research for a student teacher to promote his reflective teaching. Based on this, we are likely to hypothesize that:

“Student teachers can promote their reflective teaching during their “Teaching Practice” through the application of the action research method in the English as a foreign language (EFL) classroom.”

V. Aims of the Study

The aim of the present work is first, to describe the role that teacher training practice plays in preparing STs for the process of future effective teaching. Then, we intend to implement the action research method in the teacher training course to help student teachers improve their reflective thinking. We opt for action research method since it is a form of enquiry that enables practitioners everywhere to investigate, evaluate and think about their teaching (McNiff & Whitehead, 2006). That is, student teachers who implement action research method during their teacher training course are more likely to promote and improve their reflective thinking. Last and not Least, we are interested in exploring the relationship between action research and reflective thinking for student teachers' development.

VI. Background and Significance of the Study

Algeria as a developing country is facing the challenges of the new century with the ambitious aim of catching up with the rapid developments the world is undergoing. According to Haouam (1990) *“The key problem underlying the failure of the Algerian educational system to meet desired standards has been, and remains the low performance of teachers, which in turn is related to the poor quality of teacher education”* (as cited in Ghedjghoudj, 2001, p. 137). We understand from this that the fragility of the Algerian teacher education programs remains the first cause behind the failure of the educational system to reach the intended international outcomes behind education.

The teachers’ education program is very important because we need people who have the capacity to teach, and who can develop that capacity for the future (Sangha, Dance & Yoga, 2006). Haouam (1990) puts that *“Training and accreditation of teachers [in Algeria] have been neglected. Relatively little attention has been given to the teacher as a central element in the educational process, which of course is the major determinant of the success of any educational system”* (As cited in Ghedjghoudj, 2001, p. 139). Therefore, what do we need is an effective teacher education program with defined principles and applicable methods that could lead to equip teachers with fundamental skills, knowledge and qualities.

Therefore, our research aims at investigating the impact of applying action research, as one of the methods that could be applied in the teacher training courses, on student teachers and how it could promote their reflective thinking.

VII. Methodology

VII.1. Population and Sample

Our research population is second year Master students of Didactics specialty enrolled at the department of English at the University of Bejaia. The number of the whole population is approximately 280 students consisting of nine (09) groups.

However, for the limitations in time and resources, only a subset of this population is selected to be the sample for our investigation. Specifically, twenty eight (28) students (10% of the whole population) who have conducted their teacher training in public educational institutions have been chosen to be participants in our research. The sample is randomly chosen. It consists of females and males. Their age average is Twenty four (24).

Our decision to take Second year master students of didactics as a sample is due to some factors. Our focus in the research is to identify the effectiveness of applying AR method in teacher training to promote reflective teaching, and Second year master students of didactics intend to do their practicum in the second semester of the academic year. The second reason can be summarized in the fact that in our research, we attempt to link between studying and the professional life and development, therefore; second year master students are the most appropriate choice to take as a sample for this research.

VII.2. Data Collection Methods

In our research, we opt for a pr-experimental (Pre-test/ Post-test) design to test our hypothesis. In addition, the nature of the subject at hand leads us to adopt a mixed methodology applying both qualitative and quantitative methods of investigation. The choice has been based on the fact that we need not only a collection of numerical data to be analyzed and measured (Questionnaire), but also samples of research diaries and open discussion with the participants (Focus group) to collect qualitative data to test our previous hypothesis. Classroom observation would be the adequate method to gather qualitative data if the student teachers are being trained together in the same setting.

VII.3. Data Collection Procedures

As the study is conducted with the use of a mixed methodology, the procedures to data collection gather both qualitative and quantitative data. Four instruments are employed in this research.

For quantitative data, we think that the most applicable instrument is a questionnaire as it's the most common used instrument in English as a foreign language (EFL) and English language teaching (ELT) and provides data amenable to quantification either through the simple counting of boxes or through the content analysis of written responses. In addition to a questionnaire, a scale for reflective thinking is used

For qualitative data, research diaries are used. Our student teachers are asked to write research diaries during all their period of training since keeping a record as a research diary is often very helpful for a researcher (Koshy, 2005). These diaries have the aim of proving the fact that the participants have applied action research method in their teacher training course. Additionally, three (03) focus group sessions for evaluation were applied throughout the experimentation.

VII.4.Data Analysis Tools

To analyze data collected, the statistical package for social sciences (SPSS) software version 20 is used since it is a powerful tool of data analysis and computing (Elliot &Reise, 2011). It provides us with the descriptive statistics needed for the interpretation of the findings. Another procedure used is Excel 2007.

VIII. Structure of the Study

The research at hand is divided into two chapters. The first chapter is theoretical; it deals with the theoretical background of the study. The second chapter deals with the practical study and investigation. They are divided into sections as follows.

The first chapter entails three sections. In these sections a review of the literature will be developed on our variables. The first section develops a brief overview about Teacher education and training. The second section is devoted to the theoretical background of action research method. The last section is about reflective thinking and reflective teaching.

The second chapter is divided into four sections. In the first section, a description of the research design is provided. It includes the description of the method adopted, tools and procedures of research, the tools of data analysis and the sample of research. The second section covers the interpretations and the analysis of the results obtained from learners' questionnaire, test and from the research diaries and the focus group sessions. The third section is about the discussion of the findings. The last section covers the limitations of the study and the possible implications and suggestions for further research.

Chapter One: a Brief Overview about Action Research Method and Reflective Teaching in Teacher Education.

Introduction

The present research work aims at providing a clear answer to the research problem. Specifically, we mean to determine the effects of applying action research method on student teachers' reflective thinking. Thus, in the present study we have three variables to develop: teacher education, Action research method and reflective thinking. Understanding these three variables and exploring the relationship between them is fundamental for our research. So, this theoretical chapter aims at providing a brief overview of action research method and reflective thinking in teacher education.

Section One: Teacher Education and Training

Teaching is a profession that needs training (Singh & Sharma, 2004). In order to be an effective future teacher, the student teacher needs to put the theory and knowledge gained during all his life school into practice. Teacher education programs offer these opportunities to the student teachers. In this section we intend to develop a literature review about teaching and teacher education and training.

I. Defining Teaching

For people who don't enjoy challenges, choosing to become a teacher is the worst possible career decision (Sagor, 2000). One can best understand the meaning of teacher education by stating first what the meaning of teaching is.

Teaching cannot be defined apart from learning. Brown (2007) defined teaching as the process of guiding and facilitating learning, enabling the learner to learn by setting favorable conditions for better learning. He added that "*Your understanding of how the learner learns will determine your philosophy of education, your teaching style, your approach, methods, and classroom techniques*" (Brown, 2007, p. 08). Teaching is the cause that has learning as an effect; thus, how teachers teach determines how learning takes place.

It has been difficult to formulate a final and comprehensive definition of teaching (Das, 1985). Oxford dictionary defined teaching as "*the work of the teacher or ideas of a particular person or group*" (Oxford Dictionary, 2003, p. 443); besides, to teach means to give lessons,

knowledge or skills to somebody, and the teacher is a person who teaches especially at school (Oxford Dictionary, 2003).

Das (1985) defines teaching as a complex socio-cultural process of which learning is the result; the cause which leads to the effects. Teaching presupposes an environment where learning can take place. It means the creation of a situation which facilitates learning or leads to learning.

Atienza et al (2000) claim that, for teaching to become successful, the teacher should apply all scientific teaching learning theories and principles and use true and tried methods while at the same time the teacher should be able to tailor his teaching methods to the nature and needs of the learners. Good teaching is about developing a relationship between the teacher and the learners and the material presented (Clause-Ehlers, 2006). That is, the process of teaching involves motivation from the teacher and his students to be successful. There should be a good relationship between the students and the teacher as knowledge is shared, and between the students as they work together. Another relationship should be developed between students and the teacher and the material presented

For Leijen, Kullasepp and Anspal (2014), the first aspect of the teacher identity focuses on the “professional” role of teachers; besides, all professionals including pre-service teachers acquire competences and values via formal and informal ways. Teaching is a process through which the teacher is teaching but at the same time learning and gaining new competences and knowledge

II. Defining Teacher Education

Teacher education and training began in the first decade of 18th century in Germany with teaching seminaries preparing teachers for teaching (Bansal, 2009). To best understand the nature of teacher education and training, various definitions have been proposed and provided.

According to the Longman Dictionary of Language Teaching and Applied Linguistics (2010: 587), teacher education or teacher training refers to the field of study which deals with the preparation and the professional development of teachers. Within the field of teacher education a distinction is made between teacher training and teacher development. Richard & Schmidt (2010, p. 587) illustrated this difference as follows:

The first one deals with the basic teaching skills and techniques, typically for novice teachers in pre-service educational programs, however, teacher development looks beyond initial training and deals with the on-going professional development of teachers particularly in in-service education programs. (P. 587).

TT is the opportunity given to novice teachers in order to gain teaching knowledge and skill their competencies and capabilities. Its first aim is to prepare them for future teaching. It takes place in the practicum period. However, Teacher development is concerned with the professional development of teachers during their career. This means that, teacher development is an ongoing process of development for teachers during their career.

As Leijen, Kullasepp and Anspal (2014) put it, teacher education courses are designed to provide useful analytical and practical tools for pre-service and in-service teachers. Therefore, teacher training is critical to support student teachers to gain the knowledge and the skills they need.

II.1. Pre-service and in-service teacher education. A clear distinction is made between pre-service teacher education and in-service teacher education. According to the Longman Dictionary of Language Teaching and Applied Linguistics (2010, p. 587), pre-service teacher education is “*a course or program of study which student teachers complete before they begin teaching*”. That is to mean, a program set out to show student teachers as future teachers basic teaching techniques and give them a broad general background in teaching and in their subject matter. Pre-service teacher education typically takes place in undergraduate programs, but it can be complete in graduate school as well (Ravitch, 2007). It is intended for those who have not yet started working as teachers (Richard & Schmidt, 2010).

However in-service teacher education refers to the “*experiences which are provided for teachers who are already teaching and which form part of their continued professional development*” (Richard & Schmidt, 2010, p. 587). We understand from this definition that in-service teacher education deals with the professional development of teachers and how they are improving their teaching skills during their career as teachers.

II.2. Models of teacher education. Over the past twenty years, there have emerged a number of models of teacher education.(Thomas, 1997). According to Wallace (1991), three models of teacher education could be distinguished: the craft model, the applied science model and the reflective model.

Craft model. The model resembles the principles of behaviorism and it is highly static (Markobic, 2007). Wallace (2001) puts that in this model, the wisdom of the profession resides in an experienced professional practitioner: someone who is expert in the practice of the “craft”, hence; the young trainee learns by imitating the expert’s techniques and by following the expert’s instructions and advice; By this process expertise in the craft is passed on from generation to generation. Bailey (2006) added that the craft model has been very important in terms of learning the technical skills of teaching.

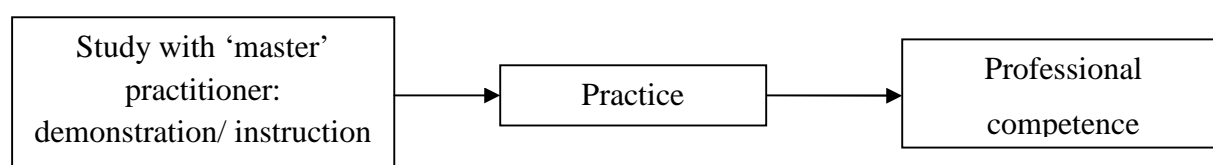


Figure 1: the Craft Model of Professional Education Training
(Adopted from Wallace, 2001, p. 06)

Figure 1 summarizes the craft model in teacher education. This model shows that for the student teacher to reach the professional competence, he should first move through two phases. First, the student teacher attends to the instructions and demonstrations of knowledge presented by master practitioner or a co-operative teacher who supervises him. After attending the theory, the student teacher moves toward practice. The student teacher should put what he gained as theoretical knowledge into practice and supposed to learn by imitating all the teaching techniques used by the co-cooperative teacher. Knowledge is acquired as a result of observation, instruction and practice.

Applied science model. Wallace (2001) claims that this model is the traditional and probably still the most prevalent model underlying most training or education program for profession. It is predictable on research findings and theory that can inform language teaching (Bailey, 2006). It derives its authority from the achievement of empirical science, particularly in the nineteenth and twentieth centuries (Wallace, 2001)

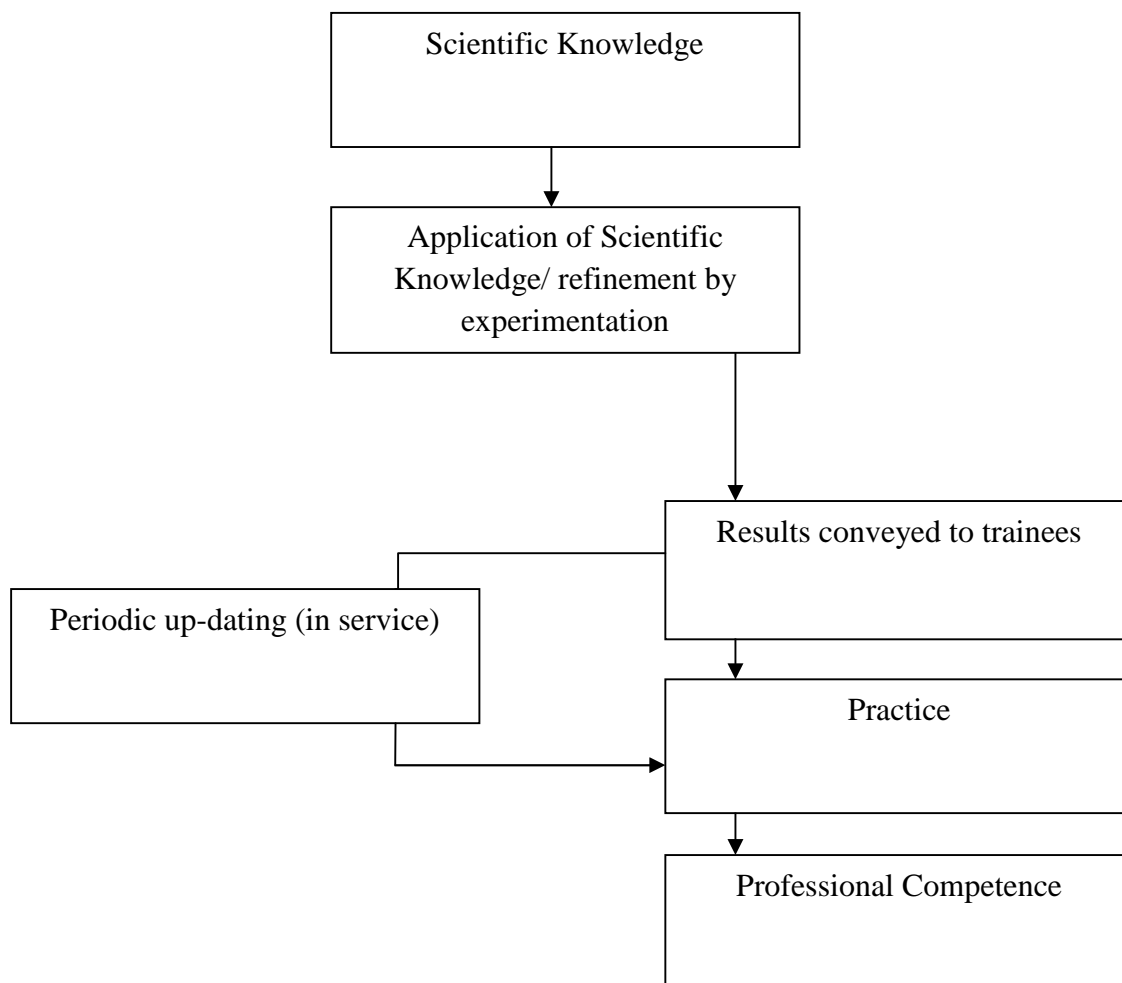


Figure 2: the Applied Science Model (Adopted from Wallace (2001, p. 09)

As it is shown above, the applied science model is essentially one way (Wallace, 2001). We understand that, in teacher education the student teacher starts his training with a basic scientific knowledge. The second step would be the application of the scientific knowledge acquired and refining it through experimentation. After having the results, it is up to the student teachers to put the conclusions of these scientific findings into practice to reach the professional competence. If the student teacher fails, it is because he has not understood the findings properly, or because he has not properly applied them (Wallas, 2001).

To sum up, teachers are said to be educated when they become enough proficient to apply the different scientific findings and theories in practice. To illustrate, second year Master and third year LMD (Licence, Master Doctorate) students of English at the University of Bejaia would put the theoretical knowledge acquired during their school life into practice in their practicum by applying this model.

Reflective model. It establishes a balance between the craft and the applied science model. It states that the student teacher learns about theories, research findings and skills which are a necessary part of profession and develops knowing-in-action through practice that is reflected upon (Wallas, 2001). The reflective model is based on the assumption that teachers develop professional competence through reflecting on their own practice. In other words, a teaching experience is recalled and considered to reach an evaluation and to provide input into future planning and action.

The final outcome of the training period is that the student teacher becomes an autonomous reflective practitioner capable of constant self-reflection leading to constant process of professional self-development (Markobic, 2007). Since reflective thinking is investigated in our research, this model is the one would be focused on.

III. Educational Research

One can best understand the meaning of educational research by stating first what research means. A working definition of research is the systematic process of attempting to find a solution to a problem (when the solution is not known) using an acceptable methodology (Tomal, 2003).

According to Bassey (1998, p. 93) “*Educational research is an enquiry which is carried out in order to understand, to evaluate and then to change, in order to improve some educational practice*” (As cited in Costello, 2007, p. 03). That is to mean, educational researchers carry out research in order to investigate defined educational issues. The aim of this research is to arrive at some solutions to different educational problems to improve the educational practice.

Educational researchers conduct research within a broad array of settings and institutions, including schools, colleges, universities with respect to the rights, privacy, dignity, and sensitivities of their research populations and also the integrity of the institutions within which the research occurs, moreover; they should be especially careful in working with children and the vulnerable populations (Tomal, 2003).

Noffke (1992) claims that although the dominant form of educational research in the early twentieth century could be typified by the testing and measurement movement, there was also a trend toward ‘field study research’. Tavakoli (2012) defined field study research as

a broad approach to qualitative research or a method of gathering qualitative data by observation or recording in natural settings

According to Kember and Gow (1992), throughout most of this century, the dominant models of educational research have been the natural science model, based on positivist research paradigms used in the physical sciences, and more recently, the interpretive model which aims to discover and interpret the perspectives of the participants in the process (As cited in Watters et al, 1998, p. 259)

III.1. Approaches to educational research. Newby (2014) put that, in educational research, three approaches are appealing. The educational research can be qualitative, quantitative or mixed research.

Qualitative research. It is used for observing and reflecting on one's thoughts feelings, motives, reasoning processes and mental states. (Tavakoli, 2012).The process of research involves emerging questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and data interpretations (Creswell, 2003) . To sum up, qualitative research deals with the exploration of the quality rather than the quantity. It is interested in investigating thoughts, feelings and insights.

Quantitative research. It is a means for testing objective theories by examining the relationship among variables; these variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures (Creswell, 2003).

Picciano (2004, p. 32-51) defined quantitative research as relying on "*the collection of numerical data which are then subjected to analysis using statistical routines...qualitative research relies on meaning, concepts, context, descriptions, and settings*" (as cited in Bray, Admanson & Mason, 2007, p. 40). A distinction is made between qualitative and quantitative research in this definition. While quantitative researchers are interested in quantifying the problem by way of gathering numerical data, qualitative researchers seek to gain understanding of underlying reasons, opinions , and motivations.

Mixed methods. It has been defined by Tashakkory & Teddie (2003, p. 711) as a type of research design in which qualitative and quantitative approaches are used in types of questions, research methods, data collection and analysis procedures and/or inferences.

Mixed methods research is an approach to inquiry that combines or associates both qualitative and quantitative forms; it involves philosophical assumptions, the use of qualitative and quantitative approaches, and the mixing of both approaches in a study (Creswell, 2003). In his investigation, the researcher uses both qualitative and quantitative methods of research. That is to mean, the researcher uses not only a collection of numerical data (Quantitative research) but more importantly interpreting the meanings of these data.

Mixed methods research data analysis involves the interpretation of statistical and thematic data analytic techniques, plus other strategies unique to mixed methods research as data conversion or transformation (Ridenour and Newman, 2008).

IV. Becoming a Teacher Researcher

According to the Longman Dictionary of Language Teaching and Applied Linguistics (2010, p. 588), teacher research is “*a term to describe teacher-initiated investigations of their own classrooms, including action research*”. The notion of teacher research seeks to redefine the roles of teachers who are viewed as active investigators of learning and interaction within their own classrooms. Such a view is said to empower teachers.

Because a major goal of teacher research is to empower teachers’ voices, traditional notions of validity and reliability have been recognized (Pappas & Tucker-Raymond, 2011). With the emergence of the AR method, the idea of teacher as researcher has been promoted (McNiff & Whitehead, 1993). The reasons why teachers have become researchers vary. The ‘teacher as researcher’ movement is a response to a variety of social conditions, political pressures and professional aspirations and for this reason its development has, to a large extent, been pragmatic, uncoordinated and opportunistic (Carr & Kemmis, 1986). The notion of teacher as researcher has a direct relationship to relating theory to practice.

Teacher education programs are needed for preparing the student teachers for effective teaching. For this, in this section, we have presented the main points related to teacher education and training. Thus, we have concluded that, teachers and student teachers develop their teaching through practice and effective teacher education program designed specifically to form good effective teachers following defined methods and approaches.

Section Two: Action Research Method

There are different methods of inquiry and investigation that could be applied in educational research depending on the nature of the defined problem. Action research method is one of these methods. It is applied by teachers in their classrooms in order to investigate different issues faced during the course. Regarding this, understanding the nature of AR, its characteristics and how to do it is crucial for any teacher. For this, this section covers the most important literature foundations concerning action research method.

I. Defining Action Research Method

The Longman Dictionary of Language Teaching and Applied Linguistics (2010) defines action research as “... *a teacher-initiated classroom research that seeks to increase the teacher’s understanding of classroom teaching and learning and to bring about improvements in classroom practices*” (Richard & Schmidt, 2010, p. 08). That is to mean, action research is a method of inquiry at the hands of the teacher that helps him evaluate his performance by understanding his/ her way of teaching and learning in the classroom.

According to Frost (2002), action research is “*a process of systemic reflection, inquiry and action carried out by individuals about their own professional Practice*” (As cited in Costello, 2007, p. 03). That is to mean, action research is a process that encompasses three essential elements, reflection as a first step, making an inquiry and then moving to the action. As put by Hart (2000), action research refers to a process which alternates continuously between inquiry and action, between practice and innovative thinking (as cited in Winter & Munn- Giddings, 2001, p. 05).

Another definition was proposed by Burns (2010, p. 02) who defined action research as “*part of broad movement that has been going on in education generally for some time. It’s related to the ideas of “reflective practice” and “the teacher as researcher”*”. We understand from this definition that action research is a method in educational research through which the researcher, generally the teacher, seeks to improve his reflective skills through practice. Furthermore, Tomal (2010) states that, in AR, the researcher is concerned with using a systematic process in solving educational problems and making improvement with the use of appropriate interventions to collect and analyze data and then to implement actions to address educational issues.

II. Principles and Characteristics of Action Research

Simply stated, action research is a systematic approach to investigation that enables teachers to find effective solutions to educational problems (Greenwood, 2007). This brief definition summarizes three main points. The first, action research is a method of investigation. Next, it can be applied by teachers and student teachers in the field of education. And then, action research is one of the research methods and approaches used to investigate and find solutions to educational problems.

Because action research is always to do with learning, and learning is to do with education and growth, many people regard it as a form of educational research (McNiff & Whitehead, 2002). However, it is important to mention that action research is not a discipline; it involves practitioners from many fields (Sociology, anthropology, engineering...), including many forms of nonacademic practice (Greenwood, 2007). Hence, action research is a method of investigation and research applied in different disciplines to explore different problems and issues.

As a method of inquiry and investigation, action research is different from quantitative and qualitative research, but has characteristics of both (Tomal, 2010). While quantitative research emphasizes the production of precise and generalisable statistical findings, and qualitative research typically permits the use of subjectivity to generate deeper understandings of meanings (Hesse- Biber, 2010), action research utilizes an appropriate intervention to collect and analyze data and to implement actions to address educational issues (Tomal, 2010).

According to Tomal(2010), action research is suitable for educators as a practical process because it does not require to elaborate statistical analysis (e.g., quantitative research), or lengthy narrative explanations (e.g., qualitative research), but is more concerned with solving a problem in an efficient and feasible manner. For example, a teacher investigating a classroom problem (Students misbehavior), he will not interest in how many students are misbehaving in the classroom (Quantitative research), neither trying to describe this problem (qualitative research). But rather, the teacher will try to find applicable solutions to solve this problem.

The principles of action research method are summarized as follows:

- Action research method is not a discipline, but rather a systematic method of investigation.
- It was regarded as a form of educational research conducted by teachers and student teachers in order to find solutions to classroom problems.
- Action research is a method of investigation different from qualitative and quantitative researches, but it has the characteristics of both.
- Action research method interested in finding practical solutions to problems, and not describing or providing statistical data about the problem.

III. Types of Action Research

Part of the confusion we find when we hear the term “Action Research” is that there are different types of action research depending upon the participants involved. Ferrance (2000) puts that a plan of research can involve a single teacher investigating an issue in his or her classroom, a group of teachers working on a common problem, or a team of teachers and others focusing on a school-wide or district-wide issue. Based on this, action research can be categorized into four main types:

III.1. Individual action research. According to Ferrance (2000, p. 03) “*Individual teacher [action] research usually focuses on a single issue in the classroom. The teacher may be seeking solutions to problems of classroom management, instructional strategies, use of materials, or student learning*”. Through this definition, we understand that this type of action research involves one teacher investigating a problem observed in his classroom. Ferrance (2000) added that it is more flexible, less professional risky, and more easily implemented than others. To illustrate, the teacher investigates the reasons why his students cannot understand the theoretical knowledge easily. He will apply action research individually to find the suitable teaching technique to maximize his students’ understanding.

III.2. Collaborative action research. This type of action research may include as few as two teachers or a group of several teachers (Ferrance, 2000). Greenwood (2007) argued that action research is not a method but a way of collaboratively coordinating social research processes to enhance liberating social change processes. Action research is always collaborative, because it cannot be developed without the contributions of others (O’hanlone & Thomas, 2003). This collaboration can be done with the learners, institutions and

colleagues. For instance, the teachers of oral expression at University will investigate collaboratively the reasons why the students do not participate during the oral expression sessions and then, they will put an action plan to promote the students speaking and oral performance in the classroom.

III.3.School-wide action research. It is a type of action research in which the action researcher focuses on issues common to all (Ferrance, 2000). An example of action research for a school could be to examine their state test scores to identify areas that need improvement, and then determine a plan of action to improve student performance.

III.4. District-wide action research. It is far more complex and utilizes more resources, but the rewards can be great; the action researcher in this type of action research deals with issues that can be organizational, community-based, performance-based, or processes for decision-making (Ferrance, 2000). An example of district-wide action research is the state investigating the reasons behind the failure of the new educational system; they will plan for an action that attempt to improve the quality of education to have better outcomes.

IV. The Action Research Process

IV.1. Action research mindset. Pelton (2010) views Action research as a model of teaching with high transparency; he developed an AR mindset of three main cyclical elements (Action+ Reflection+ data)

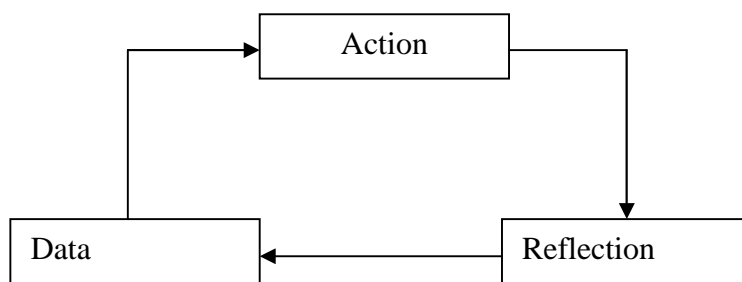


Figure 3: The AR Mindset (Adopted from Pelton, 2010, p. 07).

The process of action research goes through three main cyclical steps. According to Pelton (2010, p.05), “*Action research is best seen as a way you approach your work in the classroom and school setting; think of it as a mindset for teaching*”. He added that it is a powerful mindset for teaching because it emphasizes the teacher’s role as reflective who is continually observant, thoughtful and examiner of the actions; it involves reflection in action mindset towards teaching (Pelton, 2010).

IV.2. Action research model. The action research model has wide-ranging applications and can be carried out by individuals or groups, situated within a class, department, school or cluster of schools (Taylor, Wilkie & Baser, 2006). Kurt Lewin (1947) was the initial pioneer in establishing the action research model (As cited Tomal, 2010, p. 10). There are several variations to this model, depending upon the nature of the researcher's discipline, but general framework is similar to Lewin's original model.

Tomal (2010) compared the action research process with that of the physician in treating a patient; the doctor first makes an initial problem statement based upon the patient's complaint, conducts a series of medical diagnostic tests (Data collection), discusses the results of these tests with the patient (analysis and feedback), makes a decision and treats the patient (planning and taking the action), and then follows up on the patient's condition (evaluation and follow up).

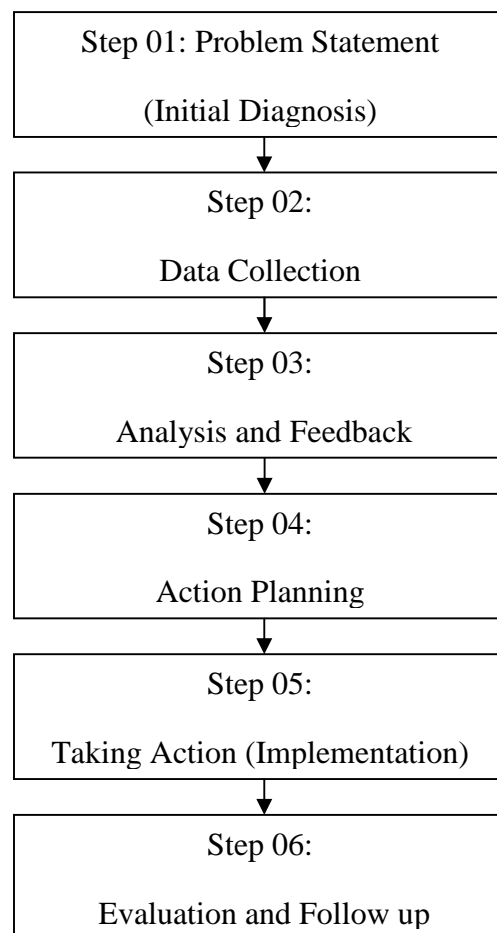


Figure 4: The Lewin's AR Model (Adopted from Tomal, 2010, p. 17).

Problem statement. Sagor (2000) puts that the action research process begins with a serious reflection directed toward identifying a problem. It starts with the identification of a principal problem.

Data collection. The researchers should accumulate valid and reliable data to justify their actions (Sagor, 2000). Data collection takes different methods. It can be through Questionnaire, interviews, Journals, focus groups ...

Analysis and feedback. During this portion of six-step process, teacher researchers will methodically examine their data.

Action planning. Whitehead & McNiff (2006, p. 256) explained action planning as: “*A plan drawn up by individuals and collectives to guide action. Practitioners should be aware that the action does not always go according to the plan, so action plans should be regarded as notional guides and not strict sequential steps*”. That is to mean, the action researcher, in this step, elaborates a guiding plan to be followed. In following this plan, the action researcher should be flexible and ready to make changes when needed.

Taking the action. In this step, the action plan would be implemented (Tomal, 2010). As a consequence of this clarification, action academic strategies are developed and put into practice (Altrichter, posch & somekh, 1993)

Evaluation and follow up. A formal assessment should be conducted in the last step. This research entails the follow up and the assessment of the action results. Action research includes not only the implementation, but also evaluation as a part of the process (Tomal, 2010). Teacher researchers finish their projects by making their professional knowledge accessible to others (Altrichter, posch & somekh, 1993).

IV.3. Cycles of action research in teacher inquiry. In teacher inquiry, teachers engage in spirals or cycles of observation, reflection, and action for the purpose of developing their own understanding and improving their practice and student learning. Wells (1994) outlines the four recurring major activities of the action research:

- *Observing:* making systematic observation of particular, relevant aspects of classroom life to determine what is actually happening.

- *Interpreting* these observations by reflecting on why things are happening as they are. For both things that are working well and those that are not in the situation, teachers attempt to discover the factors that seem to be responsible.
- *Planning change* by constructing hypotheses for the changes that might bring an improvement for the unsatisfactory aspects of the current situation. They consider how one or more of these changes might be undertaken and plan how to implement it.
- *Acting out* the plan change: they try out a new way to approach their practice.

(As cited in Pappas & Tucker-Raymond, 2011, p. 05).

V. Action Research Diary and Journal

There are several methods to collect data in action research. Selecting the appropriate one is a crucial aspect to ensure the acquisition of relevant and valid information. The old expression, “garbage in, garbage out” applies to action research because if you fail to use the appropriate method of collecting data, your research will be compromised (Tomal, 2010).

One of the most common methods used by teachers in action research is journals. A distinction is often made between a diary, a log and a journal. A journal is a teacher’s or a student teacher’s written response to teaching events (Richards & Lockhart, 2007). While a research diary according to Pappas & Tucker-Raymond (2011), may be described as an open-ended, personal and interpretive form of writing, unlike a log, which records facts related to particular concrete events; a journal is a combination of both the log and the diary, and its contents are seen as more comprehensive than those of either a log or a diary.

The Research Diary is one of the most important research methods and is very commonly used by teachers doing research since it makes a good way into research (Altrichter, posch & somekh, 1993). Diaries are particularly valuable sources of data because they show not only a development in the action but also a development in thinking, how your own perceptions changed over time, and how you used new learning to help make better sense of a situation (McNiff & Whitehead, 2006).

According to Pollard (1991) it is useful to keep a diary on a continuous basis; it should contain personal accounts of observation, feelings, reactions, interpretations, reflections, hunches, hypotheses, and explanations (as cited in Taylor, Wilkie & Baser, 2006, p. 12).

McNiff & Whitehead (2006) proposed a technique to organize your work when keeping a research diary. He claims that it's useful to divide your diary into two columns headed "what I did" or "action" (or another term to show that you are describing the action), and "what I learned" or "reflection" (or another term to show that you have reflecting on the action).

Throughout this second section, we have presented the most important points about action research. Implementing action research method in teacher research is an applicable way to investigate classroom issues and improve the quality of teaching. Therefore, understanding action research method is very important for both teachers and student teachers when investigating classroom problems and issues in order to arrive at applicable solutions.

Section Three: Reflection and Reflective Teaching

Teaching is a process that is not limited to the delivery of knowledge and instructions. The teacher has several roles that need to be mastered. One of the qualities that any teacher should have is reflective thinking. In this section we attempt to develop a general overview on reflection and reflective teaching.

I. Reflective Thinking

According to Antonietti, Confalonieri & Marchetti (2014), Reflective thinking can mean three different things. First, it consists of elaborating personal conceptions about the mental activities and abilities and in becoming aware of what occurs in our and other people's minds when we are engaged in intellectual tasks. Second, it concerns more closely the realm of social instructions and relationships, and the third kind of reflective thinking takes the form of narration. In this case individuals reflect on their own and others mental lives by trying to make sense of what happens within and around them.

Antinietti, Confalonieri & Marchetti (2014) added that the forms of reflective thinking mentioned are seen as important competences that are needed to equip and prepare an individual to face the demands of reality. In this respect, Lipman (2003) argues that:

Reflective thinking is thinking that is aware of its own assumptions and implications as well as being conscious of the reasons and evidence that support this or that conclusion. It takes into account its own methodology, its own procedures, its own perspective and point of view.(P. 26)

We understand from this definition that reflective thinking is a process that requires higher order thinking skills to understand conclusions of different situations through different methodologies and procedures.

II. Criteria of Reflective Thinking

Dewey (1916) distinguished four criteria for effective reflection which are summarized by Roger (2002): Reflection as meaning making, reflection as rigorous way of thinking, reflection in community, and reflection as a set of attitudes (Cited in Innes, 2004, p. 74).

II.1. Reflection as meaning making process. It involves the continual construction of meaning and purpose, moving the learner from one experience to the next with deeper understanding of the connections between and among related experiences and ideas; moreover, It helps from the thread of community that constitutes the deepening and thickening of understanding (Dimitriadis & Kamberelis, 2006). It is the means to essential moral ends (Innes, 2004)

II.2 Reflection as rigorous way of thinking. Reflection is a systematic, rigorous, disciplined way of thinking, with its roots in scientific inquiry (Innes, 2004). Reflection is deliberate, disciplined, and rigorous (Dimitriadis & Kamberelis, 2006).

II.3. Reflection in community. Reflection needs to happen in community, in interaction with others (Innes, 2004). Reflection is participatory; it happens within communities of committed practice and leads toward the accomplishment of shared goals (Dimitriadis & Kamberelis, 2006).

II.4. Reflection as a set of attitudes. Reflection requires attitudes that value the personal and intellectual growth of oneself and others (Innes, 2004).

III. Modes of Reflective Thinking

According to Willis (1999), there are three modes of reflection: Contextual, Depositional, and Experimental (as cited in Hillier, 2005, p.09). These modes are explained as the following:

- **Contextual.** An episode of experience is reviewed in terms of the contextual forces, e.g. time, place, race, class, and policies, which have influenced and shaped it (Hillier, 2005).

- **Depositional.** The predispositions of teachers and learners to the teaching/ learning project are identified. It is a person's orientation which influences the action, e.g. preferences, aspirations, feelings and personal reactions to purposive activity (Hillier, 2005).

- **Experimental.** The lived experience of the learning episode is considered. The person reflecting on purposive activity tries to think back to what the event was like as an experience (Hillier, 2005).

IV. Levels of reflective thinking

The three different levels of reflection are technical, practical and critical. According to Rush (2005) these levels are differentiated not only by the nature of the reflective process but more importantly by the different objectives of the reflection process and the epistemological perspective informing it.

- **Technical.** Technical reflection uses external sources of knowledge derived from formal theory and research to resolve an identified problem (Rush, 2005). The purpose of technical reflection, according to Clift et al (1990) is to direct and control practice as the identified goals of practice as considered to be unchallengeable (as cited Rush, 2005, p. 172). The concern is with the efficiency and the effectiveness of the means used to attain ends which are accepted as given (Zeichner, 1994).

Care and Kemmis (1986) claim that technical reflection is instrumental in finding the best ways of achieving practical goals without considering the underlying moral or ethical issues; this is the kind of thinking that teachers use to design lessons, plan activities and decide on teaching methods and approaches (as cited Rush, 2005, p. 172). We understand that technical reflection is concerned with the effectiveness in the application of skills and technical knowledge.

- **Practical.** according to Burns (1994), practical reflection has a broader purpose compared with technical reflection as it seeks to 'inform' practice and the practitioner. (As cited Rush, 2005, p.173). Zeichner (1994) added that, in practical reflection, the task is one of explicating and clarifying the assumptions and predispositions underlying teaching activity and assessing the adequacy of the educational goals toward which an action leads

According to Evertson & Weinstein (2006), it involves reflection about the assumptions underlying specific classroom practices, and also directs attention to the consequences of the strategies, curricula and decisions; moreover, it differs from the first level of reflection in

applying educational criteria to teaching practice to make individual and independent decisions on pedagogy

- **Critical.** According to Fook & Gardner (2007), critical reflection is both theory and practice; it involves both the analysis and the action. It incorporates aspects of the two previous levels (Bruce, 2013). Killen (2006) puts that, at the critical level, teachers become concerned with issues beyond the classroom, so that moral and social issues such as equity and emancipation can inform their reflections on classroom practices.

V. Reflective Thinking Pyramid

Taggart (1996) provided another classification of reflective thinking levels. He categorized them in the reflective thinking pyramid (As cited in Juan, 2012, p. 23). This Pyramid summarizes three levels of reflection: dialectical level, the contextual level, and technical level.

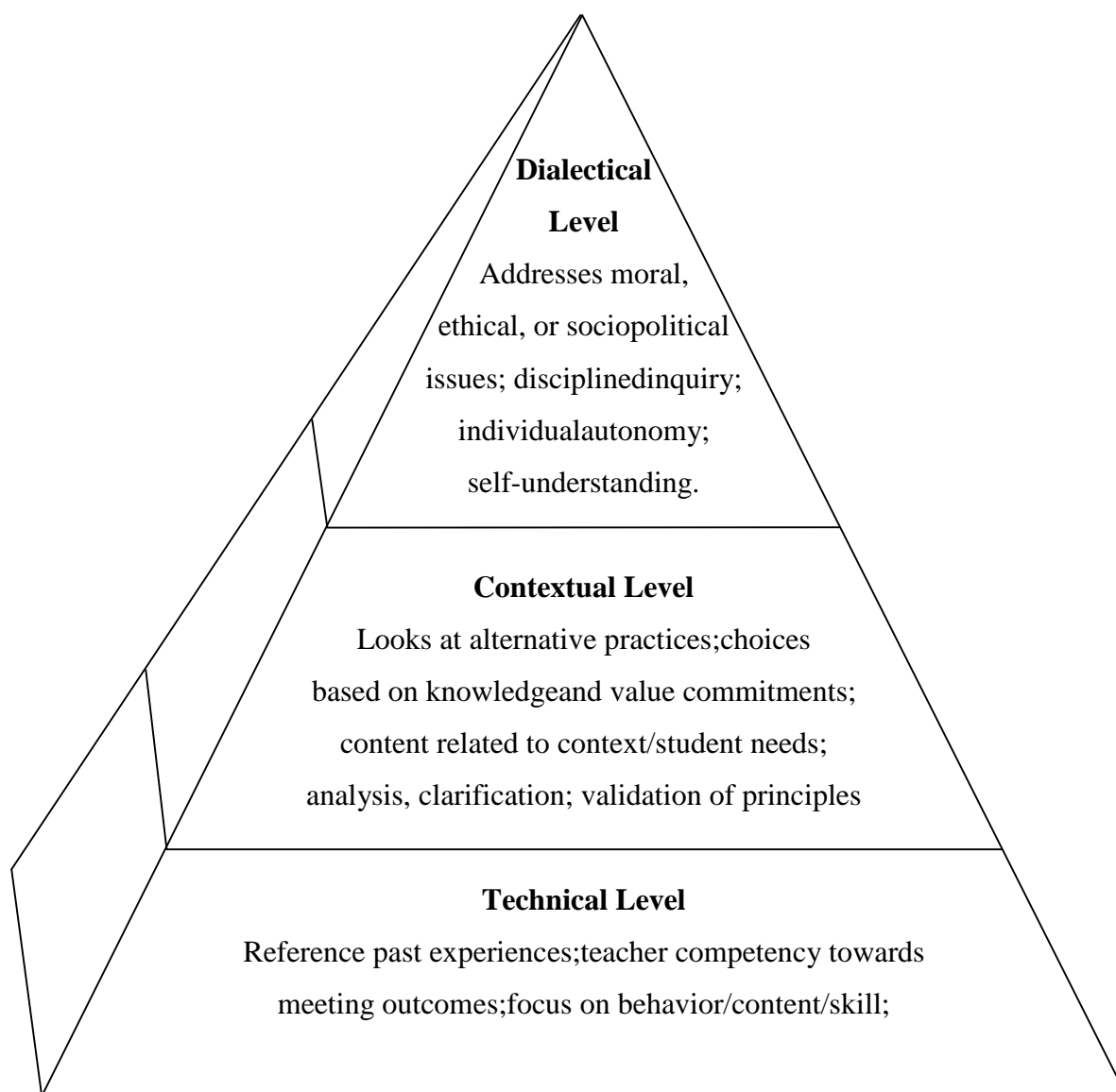


Figure 5: Taggart Reflective Model (adopted from Juan, 2012, p. 23)

VI. Reflective teaching

To train student teachers for reflective teaching becomes one of the fundamental expectations of teacher education programs. The effective teacher is not only the one who successfully applies certain instructional methods and approaches, but most importantly the one who is solidly reflective professionally (Hunt, Viseman & Touzel, 2009).

The reflective teacher is one who is able to analyze his own practice and the context in which it occurs; the reflective teacher is expected to be able to stand back from their own teaching, evaluate their situation and take responsibility for their own future action (Calderhead, 1992). Several qualities need to be met in order for the teacher to be reflective.

Juan (2012) summarized the qualities of a reflective teacher. He stated that a reflective teacher may have the following five qualities:

- Examines, frames and attempts to solve the dilemmas of classroom practice.
- Is aware of the questions, the assumptions, and values he or she brings to teaching.
- is attentive to the instructional and cultural context in which he or she teaches
- Takes part in curriculum development and is involved in school change efforts.
- Takes responsibility for his or her own professional development.

(As cited in Juan, 2012, p. 23)

Throughout this section, we have shown that reflective thinking for teachers is a crucial quality that needs to be developed. The reflective teacher is the one who has built several skills and competences. For this, we have developed in this section the most important points concerning reflective teaching. Understanding this concept is one of the basic steps toward developing this skill.

Conclusion

One of the main aims of language teacher education programs is preparing graduate learners for becoming effective future teachers. Different teaching skills need to be developed, improved and skilled to achieve this aim. Reflective teaching is one of these important skills that should be promoted in each teacher. Teachers and student teachers need to reflect on their teaching in order to improve their performances and understand their roles as teachers in the classroom. Thus, they should be provided with good and enough opportunities to practice their teaching in real settings. An effective teaching method and technique in the classroom is the required solution to improve reflective teaching. Action research is a practical method of inquiry for teachers and student teachers to investigate the different issues in the classroom environment. It encourages them to think about their practice and understand their teaching process as well as their students. Applying Action research method in the teacher training course is an applicable way for student teachers to reflect on their practice of the teaching process

Chapter II:

Methodology and Data Analysis

Introduction

The present work aims at investigating the effectiveness of adopting action research method to promote Student teachers' reflective thinking (and evaluating the extent to which AR method could be beneficial for STs in their teacher training to promote their RT. More specifically, this study attempts to find out a cause and effect relationship between the two research variables: Action Research method and Reflective Thinking in the teacher training course for Master II students of Didactics.

This chapter is divided into four sections. In the first section, a description of the study is provided. It includes the description of the method adopted, tools and procedures of research, the tools of data analysis and the sample of research. The second section is all about the analysis of the results obtained from the tools of research. As well, it covers the interpretations and the analysis of the results obtained from learners' questionnaire, test and from the research diaries and the focus group sessions. The third section is about the discussion of the findings, validity, reliability, and triangulation. The last section covers the limitations of the study and the possible implications and suggestions for further research.

Section One: Description of the Study

The first section provides a detailed description of the study. We present our methodology, describe our subjects and the instruments adopted for data collection; then, we explain the procedures of data collection. In addition to this, a brief description about data analysis tools is provided.

I. Research Variables

The study is based on three research variables. The first variable (the independent variable) is action research method. The second variable (the dependent variable) is reflective thinking. The third variable (the second dependent variable) is teacher training. Our aim is to find a cause and effect relationship between Action research method and student teachers' Reflective thinking. In other words, we attempt to prove that action research method contributes in promoting student teachers' reflective thinking.

II. Population and Sample

Our research population is Second year Master from Didactics specialty enrolled at the Department of English at the University of Bejaia. The number of the whole population is approximately 280 students consisting of (09) groups.

However, for the limitations in time and resources, only a subset of this population is chosen to be the sample for our investigation. Specifically, 28 students (10% of the whole population) who had conducted their teacher training in public educational institutions have been chosen to be participants in our research. To choose the participants we conduct a simple random sampling in which every element in the population had an equal probability of being selected (Nnadi-Oklo, 1990). It consists of females and males. Their age average is Twenty four (24).

Our decision to take Second year master students of didactics as a sample is due to some factors. Our focus in the research is to identify the effectiveness of applying action research method in teacher training to promote reflective thinking, and Second year master students of didactics intend to do their practicum in the second semester of the academic year. The second reason can be summarized in the fact that in our research, we attempt to link between studying and the professional life and development, therefore; second year master students are the most appropriate choice to take as a sample for this research.

III. Design and Methods

Our choice of the methodology to use is based on the objectives of the present study. We aim at investigating the effectiveness of adopting action research method to promote reflective thinking in teacher training. More specifically, we aim at testing the cause and effect relationship between action research and reflective thinking in teacher training and identify the extent to which action research method can be effective for promoting student teachers' reflective thinking. Accordingly, we sought that it is more appropriate to carry out an experiment in order to highlight the cause and effect relationship between the variables

The nature of the subject at hand leads us to adopt a mixed research applying both qualitative and quantitative methods of investigation. The choice has been based on the fact that we need not only a collection of numerical data to be analyzed and measured, but also samples of research diaries and focus group discussions in order to increase the validity and reliability of our research.

In our research, we opt for a pre-experimental (Pre-test/ Post-test) design since we worked with one single group in which the outcome variable was measured before and after the treatment to see if any change has occurred (Chatburn, 2011). It is worth mentioning that, action research is one method among many others that could promote reflective thinking. Thus, we avoided to adopt a “True-experimental design” since it involves comparing two groups on one outcome measure to test some hypotheses regarding causation (Marczyk, DeMatteo & Festinger, 2005). The experiment is a pre-experiment carried out with the experimental group. Twenty eight (28) student teachers have adopted action research method in their teacher training following the steps of Lewin’s (1947) action research model (Figure: 4 p.19).

Training programme. In the present study, a pre-experimental design is adopted. The experiment consists of adopting a new teaching method in the teacher training course by the student teachers. The experiment lasted almost two months, from March, 15th to May, 14th, 2015.

The first fifteen days were devoted to the course assigned to the participants. They were provided with detailed explanations and illustrations about action research method and how to adopt it in the teacher training course (Appendix: 03) and how to write action research diary. Since it was the spring’s holiday, the only way we have to contact the participants to provide them with the looked-for instructions is through creating a Facebook private group in which twenty four (24) are invited as members. The remaining four student teachers didn’t manage to join the group. Hence, we contacted them via phone to provide them with the instructions when needed.

When the participants started their teacher training course (From April 06th), they adopted action research method in their classroom. In the three phases of teacher training (observation, initiation, and demonstration), the student teachers applied the six steps of action research method. In the observation phase of the training, the student teachers focused their attention to understand the classroom, the pupils, and the teaching methods. In this phase, all the participants detected some challenges and difficulties in the classroom. After this, the student teachers tried to understand the difficulty by reading, gathering data about it and asking more experienced teachers for guidance and help. The student teachers analyzed their data and provided their feedback about the problems as demonstrated in the diaries. Arriving at this stage, the participants accomplished the first three steps of action research method (Problem statement, data collection, and analysis and feedback).

Because of the limited period of time given to the process of teacher training in this academic year (because of the strike), almost all the participants escaped the initiation phase and moved directly to the demonstration phase. In these two phases (Initiation and demonstration), the student teachers understood more the classroom since they were given the opportunity to practice and perform. The student teachers planned for their actions based on what they have understood and observed in the classroom. After several presentations in which the student teachers put their plans into application, the success of the action is evaluated.

IV. Data Collection Procedures

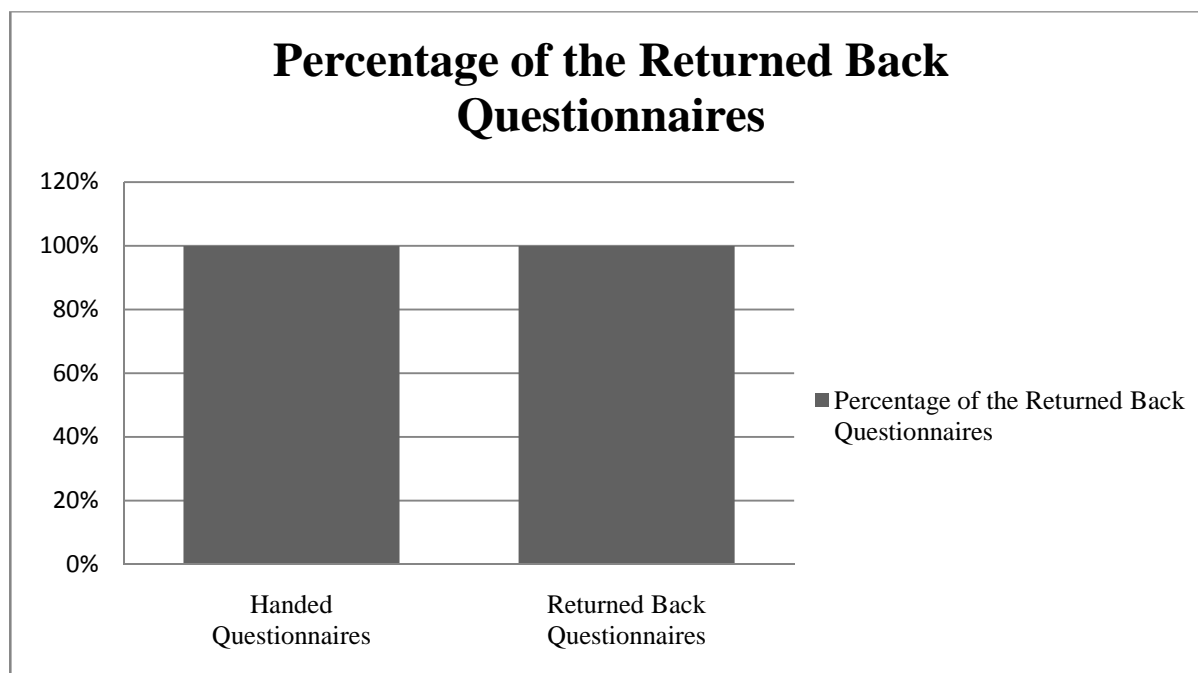
The current study has examined the application of action research method in teacher training courses to promote student teachers' reflective thinking. In our research, we opt for a mixed method. Qualitative and quantitative approaches do not only have different characteristics but also require different techniques for their analysis (Walliman, 2001). Accordingly, the following research procedures and instruments were used for qualitative and quantitative data collection in order to achieve our aim.

IV.1. Pilot Questionnaire

Aim of questionnaire. Collecting data through addressing a questionnaire to respondents is most extensively employed in many domains as education (Kothari, 2004). It was a pilot questionnaire. Regardless to the valuable quantitative data it can provide, the questionnaire was first addressed in order to confirm the existence of the problem. Semi-open questions were asked in order to gain useful data about the participants and their opinions about the TT process.

Description of the questionnaire. The questionnaire addressed (Appendix: 01) is a semi-open one since it combines open and closed questions and many questions are structured but the responses are not (Craft, 2000). The pilot questionnaire is made up of Two (02) parts. The first part is about general information. It consists of two (02) closed questions and one (01) semi- open question. The second part is about students' opinions about teaching and teacher training processes. This part contains four (04) semi- Open questions. Subsequently, the total number of the pilot questionnaire questions is seven (7). The questionnaire (Appendix: 01) was addressed after the starting of the teacher training process by the student teachers, before they adopt action research method. The first ten (10) questionnaires were addressed in April,

5th and returned in April, 6th; whereas, the remaining 18 Questionnaires were addressed in April 6th and returned in April 8th, 2015;



Graph 1. *Percentage of the Returned back Questionnaires.*

IV.2. Reflective Thinking Scale for Teachers and Student Teachers

Aim of the scale. The scale (Appendix: 02) was addressed in order to test our student teachers' reflective thinking. This scale was delivered before and after the implementation of the action research method in the teacher training course by the student teachers. Pre and post scales were addressed in order to test student teachers' improvements.

Description of the scale. The original Reflective Thinking tendency Scale (RTTS) for Teachers and student teachers was developed by Semerci (2007). It consists of twenty one (21) positive statements and twenty (20) negative expressions. The grading of the scale goes from definitely disagree, frequently disagree, partly agree, and frequently agree to definitely agree.

In our research, we adopted this scale by making some modifications (Appendix: 02). The scale adopted is made up of twenty one (20) expressions. Seventeen (17) of these expressions are taken from the original scale, and four (3) statements are added by the researcher. In our research, the scale is categorized into five factors which are: continuous and purposeful thinking, open-mindedness, being inquisitor, inquiring and effective teaching,

prescient and frank. These factors are obtained from the original scale with modifications. The original scale has seven factors.

The first ten (10) pre-tests were addressed in April, 5th and returned in April, 6th; whereas, the remaining (18) pre-tests were addressed in April 6th and returned in April, 8th. The first portion of the post tests (13) are distributed in Mai, 13th and the second (15) in Mai, 14th, 2015 and returned back in the same days.

IV.3. Focus Group.

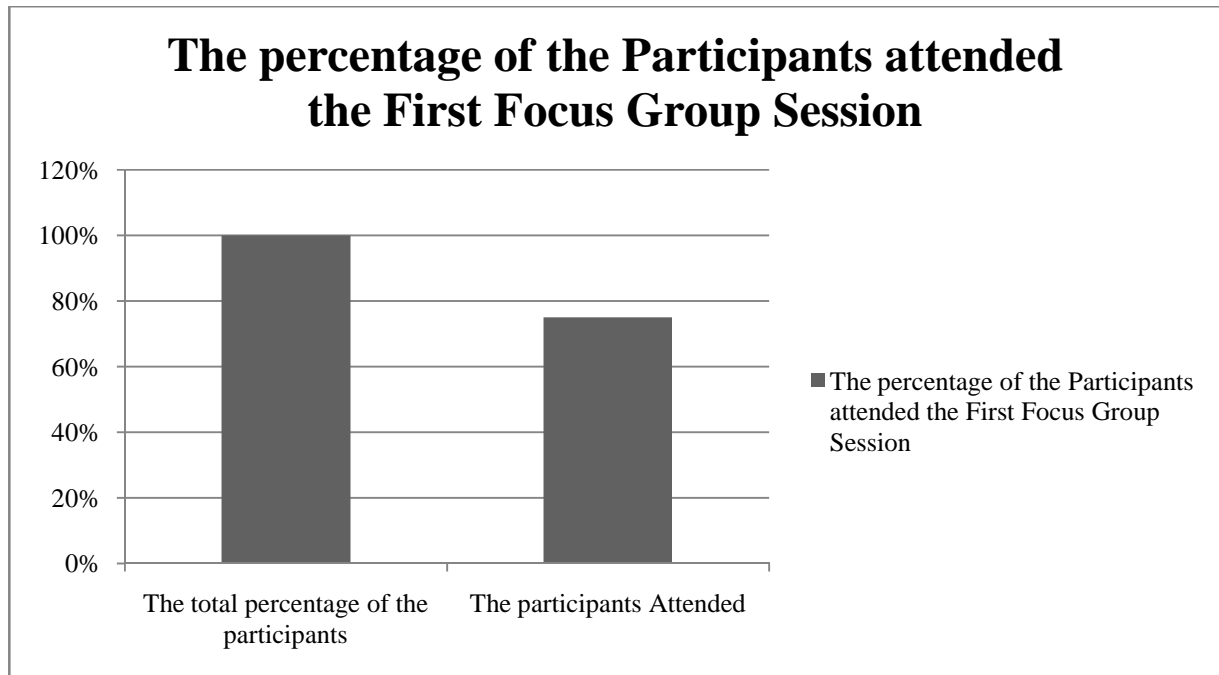
Three focus group sessions (Appendix: 04) were conducted in this research. The general aim of these sessions is to evaluate the participants' progress and improvement since focus group can be used as a rich source of summative and formative evaluation (Chalofsky, 2001). Bloor et al (2001) put that the number of the participants of focus group ranges from six to eight participants, but groups of fourteen participants have been reported. Hence, we have divided the first and the third focus group into two sub focus groups. Each contains about fourteen (14) participants. The second focus group was an online asynchronous one. The processing of the three sessions is explained as follows:

IV.3.1. First focus group session.

Aim of the first focus group session. The aim behind the first focus group session was to ensure the well progress of the teacher training process. The questions were asked to know first whether the participants have started their teacher training. In addition to this, qualitative data about student teachers' attitudes and feelings were gathered.

Description of the session. The first focus group was divided into two sub focus groups. The first one takes place in April, 5th and the second in April 6th, 2015. Because of time and place challenges and limitations, not all the participants have taken part in this session. The first sub focus group session was conducted with 10 students only, and the second with 11 students. The total percentage of the participants in the first focus group session is (75 %) two evaluative questions were asked in order to ensure the well progress of the student teachers' teacher training process. These questions are:

- How was the starting of your teacher training process and how did you feel in the first session?
- How did you find the classroom environment?



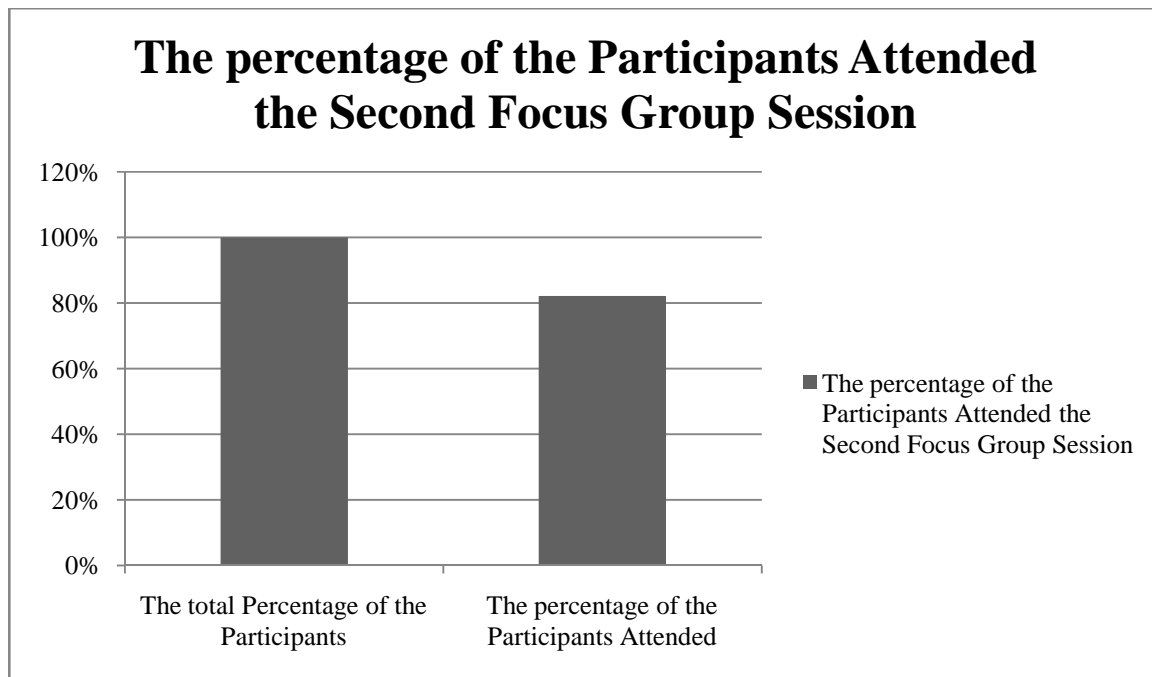
Graph 2: *The Percentage of the Participants attended the Focus Group Session one*

IV.3.2. Second focus group session

Aim of the session. The aim of this session was to ensure the well progress of the implementation of action research method in the teacher training courses by the participants.

Description of the session. The second focus group session is online. The focus group session was asynchronous since it requires from the respondents to discuss with each other in an online forum, but they are not required to stay online at the same time (Chan & Maurice (2013). An online focus group contains from (15 to 20) participants (Litosseliti, 2003). 23 participants from 28 participated in the session. The total percentage of the participants attended is (82, 14 %). It took place in April, 19th and 20th. The space used was a Facebook group since it can be created to accomplish the role of the virtual focus group (Fulkerson, 2012). Two questions were asked in this session as follows:

- What are the problems you found and the difficulties you faced in the classroom?
- How are you dealing with these problems?



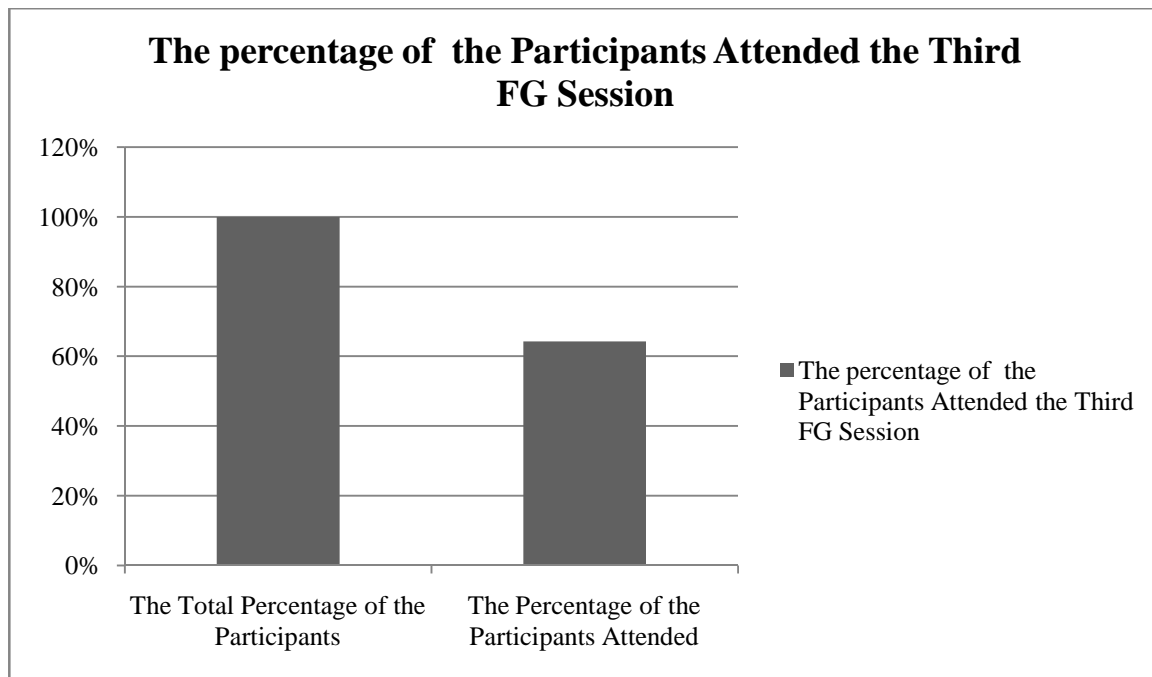
Graph 3: *The Percentage of the Participants attended the Focus Group Session Two*

IV.3.3. Third focus group session

Aim of the session. The two evaluative questions were asked in order to gain valuable qualitative data about student teachers' opinions and attitudes toward their adoption of action research method in their teacher training courses.

Description of the session. The third focus group was divided into two sub-sessions. The first one was taken place in Mai, 13th and the second in Mai, 14th, 2015. The total number of the participants in the third focus group session is 18. Two questions were asked:

- How do you evaluate action research method?
- What are the improvements you made by the adoption of this Method?



Graph 4: *The Percentage of the Participants attended the Focus Group Session Three*

IV.4. Research Diaries

Aims of the research diaries. The student teachers were asked to write action research diaries. These diaries serve as step by step recordings which provide qualitative data for the analysis. Since, it is not possible to observe all the student teachers during their teacher training, action research diary is the adequate research tool that could provide detailed information and data. Diaries are especially suitable for exploring affective data (Wallace, 2008). The fundamental aim of these dairies is to provide a concrete proof and evidence that the participants have applied action research method in their teacher training course. Through these diaries, main points are tested and evaluated:

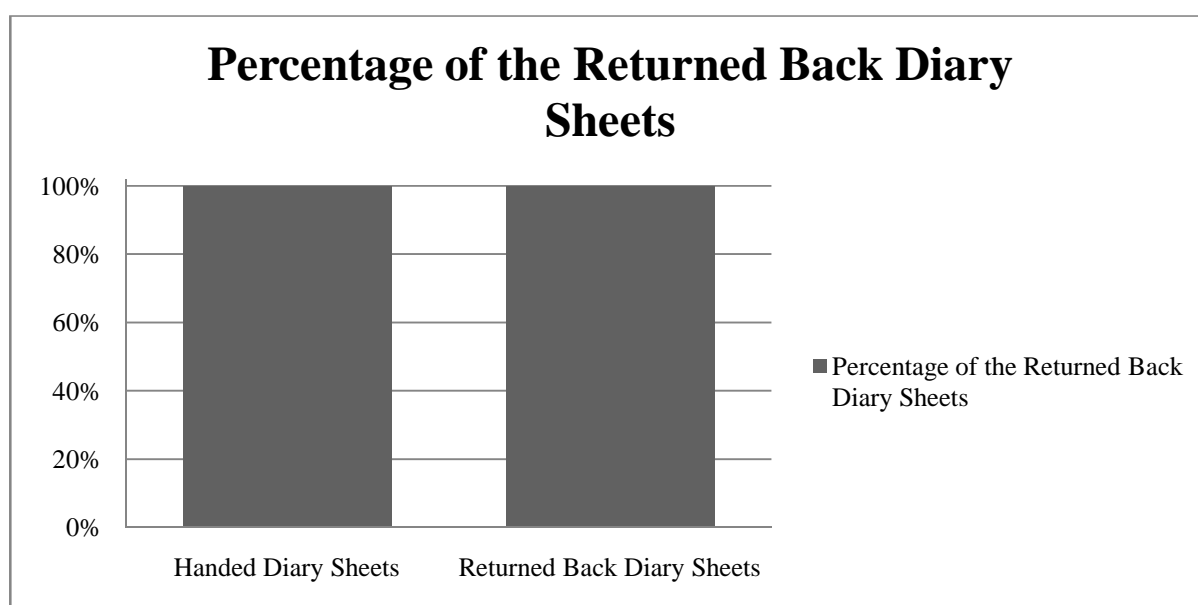
- What are the student teachers' opinions about teaching?
- Did the student teachers adopt action research method in their teacher training courses?
- How did student teachers evaluate their teacher training process?

Description of the research diaries. The twenty eight (28) student teachers were asked to write diaries during their teacher training. To achieve this, an action research dairy sheet (Appendix: 05) designed by the researcher was given to each participant. In these sheets, six (06) points are required to be developed.

To start, the student teachers were given a space as an introduction in the sheet. In this space, they expressed their points of view about the process of teaching in general. What the process of teaching means and what are their points of view about it. The second point to be developed concerns the identification of a problem. As one of the main steps of action research method, the student teachers were asked to write about the difficulties they faced during their teacher training. Fundamentally, one problem should be focused on and highlighted by the student teachers. The third point is complementary to the second. After identifying the difficulty and making researches to understand it, a space was left to the participants to clarify it and give their points of view about it. As a fourth point, the student teachers were asked to write briefly about the action they suggested as a solution and how they have applied it in their teacher training course. Then, the evaluation of this action was put as a fifth point to be mentioned. The student teachers were asked to clarify whether the action they have adopted was successful or not.

As a last part in the diaries, a space was reserved for the student teachers to write and evaluate their process of training in general. What they have gained from this experience and how they evaluate its effectiveness.

Twenty eight diary sheets were distributed to the student teachers on April 5th and 6th, 2015 and all the sheets returned back in different days starting from May 3rd to 14st, 2015. Each participant gives back the dairy sheet when he ends his action research in the teacher training course.



Graph 5: *The Percentage of the Returned back Diary Sheets*

V. Data Analysis Tools

To analyze data collected, the statistical package for social sciences (SPSS) software version 20 is used for the questionnaire and the test (quantitative data) since it is a powerful tool of data analysis and computing (Elliot & Reise, 2011). It provided us with the descriptive statistics needed for the interpretation of the findings. Another procedure used is Excel 2007. For the focus group sessions, we reported the main points discussed by the participants and categorized them into defined themes. The diaries are interpreted focusing on the points that serve to our study.

In this section a detailed description of the methodological part of the study was provided. Starting from indentifying the research variables, in this part, we introduced the population and the sample, the methodology adopted and the tools and procedures employed. We described these tools and determined their aims.

Section Two: Data Interpretations and Analysis

Introduction

In this section, all the data collected through the research instruments are analyzed in details. Results are represented in tables and graphs in addition to an interpretation of each result. We start by the analysis of the pilot questionnaire. We move to the interpretation of the focus group (results. Then we provide the detailed interpretations of the Diaries. We finish by the analysis and the comparison of the pre and post tests.

I. Pilot Questionnaire Data Analysis and Interpretation.

To analyze the pilot questionnaire, we provide both the numbers (frequencies) and the percentages of each result. We use tables in order to facilitate and organize the analysis. Under each table, brief and concise interpretation is given.

I.1. General information about the participants

I.1.1. Age.

Table 1. *Student Teachers' Ages*

Ages	22	23	24	25	26
Number of the Student teachers	4	8	7	6	3
Percentage (%)	14,3 %	28,6 %	25,0 %	21,4 %	10,7 %

From what is shown in (Table.1), our sample's age varies from 22 to 26 years old and the average is 23, 85 years old.

I.1.2. Is didactics of English your personal choice?

Table. 2. *Student Teachers' Choice of Didactics.*

Options	Yes	No
Number of the Student teachers	28	0
Percentage (%)	100 %	0 %

In (table. 2), we notice that (100%) of our participants responded “yes” for Didactics of English as their personal choice. We conclude that all of them have decided to become future teachers of English.

I.1.3. Where do you conduct your teacher training?

Table 3. *Student Teachers’ Training Location.*

Options	University	Middle School	Secondary School
Number of the Student teachers	3	1	24
Percentage (%)	10,7 %	3,6 %	85,7 %

(85,7 %) of our sample conduct their teacher training in Secondary school and (10,7 %) at University as shown in (Table. 3), and only (3,6 %) of the sample conduct their teacher training in middle school.

I.1.4. Is doing teacher training your personal choice?

Table 4. *Student Teachers’ Choice of Teacher Training*

Options	Yes	No
Number of the Student teachers	28	0
Percentage (%)	100 %	0 %

As it is shown in (Table. 4), (100%) of our participants have chosen to conduct teacher training by their own. This can be interpreted by the fact that all of them have chosen to study didactics and become future teachers. So it is logical to find the same percentage in both question 2 and 4.

I.1.4.1. Why did you choose to conduct teacher training?

Table 5. *The Reasons behind Choosing to Conduct Teacher Training.*

Reasons	Percentage of Answers	Number of STs	Percentage of STs
a. To gain teaching experience		13	46,4 %
b. To improve my teaching skills		12	42,9 %
c. To gain knowledge about teaching		4	14,3 %
d. I like teaching		3	10,7 %
e. Practice my teaching		4	14,3 %
f. Know more about classroom and pupils behavior		1	3,6 %
g. Practice different teaching methods		1	3,6 %
h. To get prepared for the professional life		2	7,1 %
i. I'm obliged; I don't have another choice		2	7,1 %

(100 %) of our participants responded that they have chosen to conduct teacher training as a personal choice, but the reasons behind this choice differ from one student to another. These reasons are summed up in (Table. 5). Some student teachers chose more than one reason to justify their choice.

- Almost half of the participants have chosen to conduct teacher training to gain teaching experience and improve their teaching skills and competences. This was expressed by (46, 4 %) for gaining experience and (42, 9 %) for improving teaching skills.
- (14, 3 %) of the participants justified their choice by their willingness and desire to gain knowledge about teaching and put what they have studied as theory into practice.
- A group of the participants have chosen to conduct teacher training because they like teaching. This was expressed by (10, 7 %) of the participants.
- (7,1 %) was the percentage of the participants who justified their answer by the fact that they were obliged. They added that they didn't have another choice except for teacher training. Though, in question (04), they have argued that doing teacher training is their personal choice. The same percentage represents the participants who justified their answers by the fact that they want to get prepared for the professional life.

- (3,6 %) of the participants explained that they want to understand and know more about the classroom issues and pupils' behavior. The same percentage (3,6 %) of the participants were interested in discovering and understanding different teaching methods as a reason behind their decision.

I.2. Students' opinions about the teaching and teacher training processes.

I.2.1. Do you think that the way teacher training is conducted could be helpful to promote your reflection on your future teaching?

Table 6.*Student Teachers' Point of View on Teacher Training in our Country.*

Options	Yes	No
Number of the Student teachers	11	17
Percentage (%)	39,28 %	60,72 %

As shown in (table. 6), (60,72 %) of the participants saw and believed that the way teacher training is conducted in our public educational institutions is not helpful to the student teacher to reflect on his future teaching. We conclude that the problem exists and exploring its reasons could lead to find the solution. However, the remaining (39,28 %) of the participants stated that TT, as is conducted, is helpful.

I.2.1.1. Student teachers' reasons on question one (part two).

The following two tables summarize the reasons for both "Yes" and "No" answers. Some student teachers provide more than one reason behind their choice.

Table 7.a.*Reasons for Option One "Yes"*

Percentage of Answers	Number	Percentage
Reasons for Option one "Yes"		
a. Practice teaching in real situations "Classroom"	2	7,1 %
b. Understanding what teaching really is	3	10,7 %
c. An opportunity to put theory into practice	2	7,1 %
d. An opportunity to explore classroom issues and problems	4	14,3 %

Table 7. b. Reasons for Option Two “No”

Percentage of Answers Reasons for Option two “No”	Number	Percentage
a. No guidance for the ST	4	13,8 %
b. A very limited period of time	7	24,1 %
c. No defined program was given to the ST to be followed	5	17,9 %
d. No responsibility is given to the ST in his TT	3	10,3 %
e. No evaluation to the ST teaching performance	1	3,4 %
f. Lack of organization	7	24,1 %

On one hand, many reasons and justifications were given by the participants who believe that teacher training as is conducted in our schools is helpful to reflect on the future teaching. These justifications can be summed up in five major reasons as follows:

- A group of the participants believed that teacher training as it is conducted is an opportunity to explore classroom issues and problems. This expressed by (14,3%) of our sample.
- Another group of (10,7 %) of the participants added that teacher training is an opportunity to understand what teaching really is.
- (7,1 %) is the percentage of the participants who justified their choice by the fact that TT, regardless to the way is conducted, is helpful for reflective teaching since it is an opportunity to put theory into practice and practice teaching in real situations (classroom situation).

On the other hand, reasons and justifications were given by the participants who believe that TT as is conducted in our school is not helpful to reflect on the future teaching. These justifications can be summed up in six major reasons as follows:

- (24, 1 %) of the participants justified their choice by the fact that the student teachers conduct their teacher training haphazardly and chaotically without any organization. The same percentage of the participants (24, 1 %) justified their choice by the limited period of time which is not enough for student teachers to improve their teaching skills and reflect on their future teaching.
- (17,9 %) of the participants specified more and added that in the way teacher training is conducted, there is no defined program given to the student teachers to be followed.

In addition to this as expressed by (10, 3 %) of the participants, the student teachers are given the total responsibility during their teacher training without any guidance. This could be harmful rather than helpful to them. Since they are still learning, they still need some guidance.

- Always in the sake of organization and guidance, no evaluation to the student teacher teaching performance is launched as expressed by (3, 4 %) of the participants.

I.2.2. Do you apply a specific teaching method during your teacher training?

Table 8. *The Student Teachers' Appliance of Teaching Method.*

Options	Yes	No
Number of the Student teachers	7	21
Percentage (%)	25,0 %	75,0 %

As shown in (Table. 8), only (25 %) of the participants applied a specific teaching method during their teacher training courses. The other 75 % are doing their teacher training courses without any program or method followed; a fact which is very crucial.

The student teachers who answered “Yes” cited the method they applied. This is summarized in (Table. 9)

Table 9. *The Methods Applied by the Student Teachers in their Teacher Training.*

Methods Applied	Percentage of Answers	Number	Percentage
g. Competency based method		1	3,6 %
h. Communicative language teaching method (CLT)		3	10,7 %
i. Role play method and direct method		1	3,6 %
j. Variation between different methods		2	7,1 %

(25 %) of our participants applied a specific teaching method during their teacher training courses. These methods differ from one participant to another as follows:

- Three participants (10,7 %) applied communicative language teaching method in their TT course.

- Two participants (7,1%) responded that they vary between different methods.
- 3,6 % of the participants applied competency based method. The same percentage for the participants who applied both direct method and role play method.

I.2.3. Do you make efforts to improve your teaching performance?

Table 10. *The Student Teachers' Contribution to their own Teaching Performance.*

Options	Yes	No
Number of the Student teachers	28	0
Percentage (%)	100 %	0 %

(100%) of the participants responded “yes” for making efforts to improve their teaching performance. This is logical since they personally chose to study didactics of English. Hence, they justified their personal choice.

Table 11. *Ways of Improving Teaching Performance.*

Percentage of Answers	Number	Percentage
Ways to Improve Teaching Performance		
a. I try to find the suitable method to apply	11	39,3 %
b. I read about teaching	03	10,7 %
c. I try to develop my language performance	04	14,3 %
d. I try to be flexible	05	17,9 %
e. I get prepared before the starting of the lesson	10	35,7 %
f. I ask more professional teachers about teaching	03	10,7 %
g. I evaluate my teaching performance	01	03,6 %
h. I try to be original and creative in my presentations	01	03,6 %

The participants suggested many ways and techniques through which they were trying to improve their teaching performance. These ways and techniques can be summarized as follows:

- (39,3 %) of the participants confirmed that what is needed to improve teaching performance is a suitable teaching method to take and apply. Hence, they always try to find the suitable one.

- (35,7 %) of the participants argued that any student teacher needs to be prepared for the lesson before starting it. Getting prepared is one of the ways to improve teaching performance.
- Trying to be flexible when teaching was the response given by (17,9 %) of the participants.
- Another group (14,3 %) stated that improving teaching performance requires first improving language performance. Therefore, they try to develop their language abilities as a way of leading to improve their teaching performance.
- (10,7 %) of the participants considered that understanding and knowing about teaching is the basic starting to improve teaching performance. This could be either through reading about teaching in general or asking more professional teachers about the different aspects of teaching.
- (3,6 %) of the participants tried to improve their teaching performance by evaluating their teaching and others by seeking to be original and creative in their presentations.

I.2.4. How can the student teacher develop his teaching skills during the teacher training course?

Table 12. *Ways Teaching Skills can be Developed in Teacher Training Course.*

Options	Independently	Dependently	Both
Number of the Student teachers	6	20	2
Percentage (%)	21,4 %	71,4 %	7,1 %

As it is shown in (table. 12) three responses were given to this question. (71,4 %) of the participants believed that the student teacher needs to be dependent to the supervisor in order to improve his teaching skills in the teacher training course. (21, 4 %) of the participants saw that the student teacher is the first and the last responsible for improving his teaching performance. That is to mean independently. The last portion of (7, 1 %) of the participants believed that the student teacher improves his teaching performance both independently and dependently at the same time. These answers are justified in (Table. 13)

The following three tables summarize the justifications given by the student teacher s for the three responses “Independently”, “Dependently”, and “Both”.

Table 13. a. Reasons for Developing Teaching Skills Independently

Percentage of Answers Reasons for option one (Independently)	Number	Percentage
a. I like being creative, so I try everything by myself	01	3,6 %
b. The supervisor is just a guide no more	02	7,1 %
c. I understand classroom and teaching problems depending on my previous knowledge not the trainer	01	3,6 %
d. It is my own responsibility	01	3,6 %
e. I prefer to rely on my own capabilities	01	3,6 %

Table 13.b. Reasons for Option Two “Dependently”.

Percentage of Answers Reasons for Option Two (Dependently)	Number	Percentage
a. The trainer is more experienced	11	39,3 %
b. The trainer is a guide in my TT process	03	10,7 %
c. The trainer is an example to follow	03	10,7 %
d. I need to follow the trainer’s method and techniques	03	10,7 %
e. The trainer is needed to clarify ambiguities	02	7,1 %
e. The trainer provides purposeful pieces of advice	02	7,1 %

Table 13.c. Reasons for both Options “Independently and Dependently”.

Percentage of Answers Reasons for the both Option	Number	Percentage
a. I try to make personal efforts, but I need my supervisor’s guidance	2	7,1 %

(21,4 %) of the participants believed that the Student teacher should improve his teaching performance independently in the teacher training course. Different reasons were given to justify and illustrate this choice:

- (7,1 %) of the participants justified their choice stating that the supervisor is just a guide and no more
- Another group of (3, 6 %) of the participants detailed more in their answers and stated that improving teaching performance is the student teacher's own responsibility. He should rely on his own capabilities and depend on his previous knowledge to understand the classroom issues not on the supervisor.

However, (71, 4 %) of the participants believed that the student teacher needs to be dependent to the supervisor in order to improve his teaching skills in the teacher training course. Different reasons were given to justify and illustrate this choice:

- (39, 3 %) of the participants justified their choice by the fact that the student teacher needs the supervisor since he is more experienced to benefit from his experience.
- (10, 7 %) is the percentage of the participants who thought that the student teacher improves his teaching performance dependently on the supervisor who is the guide and the best example to be followed. The same percentage of the participants argued that the student teacher needs to be dependent to the supervisor and follow his teaching method and techniques.
- A group of (7, 1 %) of the participants justified their choice by the fact that the supervisor is needed to clarify ambiguities and helps the student teacher by providing him with purposeful pieces of advice.

The participants who responded for both choices (Dependently and Independently) represent (7, 1 %) of the sample. They justified their choice by the fact that the student teacher should make personal efforts, but he also needs his supervisor's guidance.

II. Focus Group Data Interpretation

The total number of the questions asked in the three focus group sessions is six questions. Valuable qualitative data is collected. It revealed six overarching themes across the three FG sessions. The themes address both the processing of the teacher training course and the implementation of the action research method during the student teacher s' teacher training courses. These themes are summarized as follows.

Theme 01. The starting of the student teachers' training process.

In the first focus group, participants discussed and shared their feelings related to their teacher training. "How did you feel in the first session of your teacher training" is the question raised. The majority of the participants reported feelings of anxiety and stress. Some of them expressed that it was difficult for them to keep control and, because of stress and anxiety; they lost their language and even more their self confidence. Some others expressed the feeling of hesitation. However, the minority of the participants argued that they felt ordinary and behaved normal. They justified the positivity of their behavior and feeling by the fact that it is not the first time for them to be found in that situation since they have already experienced this before.

Theme 02. The classroom environment situation.

In describing the classroom environment, many respondents talked about the classroom size. They argued that the classes are so crowded and hence so noisy. The unfamiliarity of the classroom environment was another issue raised by the respondent. Some of them stated that it was difficult, the first time, to adapt themselves into the classroom. The participants who conducted the teacher training in middle and secondary schools added that classrooms are different from those at University. This difference is remarked both in classroom size and arrangement. The classrooms are smaller compared with University classrooms, but they are too much crowded. Other respondents preferred to comment on pupils' behavior. All of them agreed on the fact that the pupils' behavior was critical. Furthermore, they stated that it was totally different from their manner of behaving when they were in school. This is especially when they described how the pupils deal with their teachers and with the other school stuff. Most of the participants used the term '*No respect*' to describe the pupils-teacher relationship.

Theme 03. The difficulties faced by the student teachers in their teacher training course

The problems faced and the difficulties found by the student teachers during their teacher training was one of the major themes discussed in the focus group. The respondents have observed many problems and critical situations in the classroom. Most of these problems are related to the pupils. Some of the respondents talked about the lack of motivation among the pupils. They argued that this issue was observed mainly in the classes of science steam. There was a lack of interest in learning English. This was shaped by the fact that there is no interaction and participation in the classroom. Most of the respondents claimed that, most of the time, the teacher is the only source of knowledge in the classroom. Others added that the

pupils do not do their homework; what is more, they do not bring the appropriate material (School book) to the classroom. Moreover, the same faces are seen each time the teacher asks a question. Another problem discussed was related to the classroom size. As mentioned before, the classrooms are so crowded and hence so noisy. Some respondents expressed their difficulties in attracting pupils' interest and attention. Some others highlighted the issue of the pupils' misbehavior. They confirmed that most of the pupils do not respect their teacher. They added that the pupils are not only speaking when the teacher explains but also laughing and disturbing their colleagues.

Theme 04. The solutions proposed by the student teachers

Across the second focus group, the respondents proposed some actions that can be applied as solutions to deal with the defined problems. In order to raise participation and make all the pupils interact, some respondents notified that they found themselves obliged to select the pupil to answer each time they ask questions. Others added that they try to attract the pupils' attention and concentration by giving them interesting examples which have relationship with their field of study (Classes of science). To deal with the pupils' misbehavior, some respondents argued that the best solution to deal with this problem is to create a friendly relationship with the pupils. However, being self-confident and serious in the own work is another solution taken by others.

Theme 05. Evaluation of the action research method

When discussing action research method, a subset of the participants intervened expressing their regret concerning some limitations prevent them to complete their research in the classroom. All of them assumed that the period of time given was very limited. Hence, they didn't complete the action research method during their teacher training. They all stopped at the step of applying the action. They argued that, because of restricted period of time and lack of sessions of presentations in the teacher training, they didn't apply their actions to evaluate their success. However most of them have successfully adopted action research method during their teacher training. Most of them asserted that it was interesting for them to take part in the classroom as a researcher.

Theme 06. The improvements made by the student teachers after the adoption of action research method in their teacher training.

The idea of adopting action research method in the teacher training has inspired most of the participants. They expressed that they have changed their idea about what teaching really is. Teaching is no more limited to the process of recycling knowledge. Some of the participants added that they have discussed the process with their supervisors and they worked together to understand the classroom problems. One of the participants commented: *“I found myself trying to understand my classroom deeply; this is what I did not before”*. According to his point of view, the teacher should understand his classroom, pupils, and more importantly himself before starting to deliver the lesson. *“If I had much time, I would like to investigate all the classroom problems not only one”*, this is how one of the participants intervened.

Even though not all the participants attended the focus group sessions, they are evaluated as successful. Large amount of qualitative data is reported. The participants provided us with an image describing the classroom situation. They discussed the several problems faced and how they dealt with them. At the end, the participants evaluated their action research method and expressed the improvements they felt they reached.

III. Diary Data Interpretation

The twenty eight (28) diary sheets distributed to the participants are returned back. In interpreting these diaries, three (03) main points are put under the light. We aim to indentify whether the participants adopted action research method in their teacher training courses or not. For this, the answers of the following three questions are checked out in the regained diaries. These questions are:

- What are the student teachers opinions about teaching?
- Did the student teachers adopt action research method in their teacher training courses? And how?
- How do the student teachers evaluate their teacher training process?

Before starting the interpretations, it is worth mentioning that one student teacher is conducting his TT in middle school, three at University, and twenty four at secondary school.

III.1. Question 01. What are the student teachers’ opinions about teaching?

“Expressing your own point of view about teaching” is the first point developed in the participants’ diaries. The question is answered by all the participants. Different responses describing different points of view are given. Each participant has chosen his personal angle

to discuss this point. The several opinions of the participants are categorized under the following six themes:

Theme 01. The teacher's roles

Thirteen participants preferred to comment the general role of the teacher. *Teaching is the process of transmitting knowledge to the learners.* The common response repeated by these participants. Some of them added that the teacher needs to be *skilled* and *competent* in order to effectively transmit the desired knowledge to the students. They relate the process of knowledge transmission to the learners' understanding because effective teaching results in successful learning. In the light of this point, the teacher should help and guide his learners to acquire the imparted input.

However, Two participants stated it clearly that teaching is not limited to the process of knowledge provision and transmission. Implicitly, eight other participants illustrated this view by citing several roles of the teacher regardless to knowledge transmission. An instructor, *a monitor, a guide, a psychologist, a facilitator, an actor, a trainer, a motive...* and others are all functions required to be performed by the teacher. Two participants shed light on the role of the teacher as one of the parents. Only two participants highlighted the role of the teacher as *a researcher* in their responses. They pointed out that the teacher is responsible for the entire classroom. He should make efforts to understand and face the different classroom difficulties. Thus, teaching is a challenging profession.

Theme 02. Teaching is a process of great responsibility.

Fifteen participants confirmed that teaching is a profession of a great responsibility. The teacher is responsible for his learners and for the entire classroom. Building new knowledgeable educated generations is not something easy to do. Thus, the participants approved that the teacher should be worthy of this responsibility. Moreover, the participants claimed that how learners learn mirrors the teacher's method and techniques; that is to mean, the success or the failure of the learners is directly related to the teacher. The participants summarized some of the responsibilities of the teacher. The major one is his learners. Understanding their needs, lacks and necessities is one of the duties of the teacher. Teaching demands tolerance, wisdom, attention, reflection and patience to achieve the intended goal behind the process. The teacher is responsible for the entire classroom. He should set the favorable conditions for his learners to learn.

One of the participants preferred to shed the light on the situation of teaching in our country. He assumed that the teaching programs in Algeria need to be *skilled* and *ameliorated*. He specified the point that the school books, which are the first guide to the teacher, should be *original* and well designed by the experts. He summed up by stating that “*The pupils need to receive good teaching to achieve good learning*”. Hence, the teacher needs to be well prepared for this profession.

Theme 03. Teaching is a noble and honorable job.

Eight participants preferred to describe teaching as *an art*, a *noble*, *sacred*, *modest* and *honorable* job. They justified their response by citing some of the gracious qualities of the teacher. They pointed out that, before the teacher builds the learners’ knowledge, he builds up their personalities. They focused on some of the honorable qualities of a good teacher. The teacher teaches morals and good behavior before skills and knowledge. He is educating before instructing. Through his pieces of advice, the teacher is building educated generations and thoughtful citizens.

Theme 04. Teaching is very interesting.

A set of the participants preferred to talk about their personal points of view and comments on teaching. Five participants stated that teaching is *interesting* and *enjoyable*. . To justify their responses, one of them highlighted the fact that the process of teaching goes through different stages. *Presentation*, *preparation* and *practice* are the three steps of planning the course. Through these three steps, the teacher makes his efforts to be creative and original. Another participant put that the teacher tries to be *flexible* and *effective* during the delivery of the lesson. All these tasks make the process of teaching *interesting* as stated by certain participants. The last one affirmed that he likes teaching and he makes efforts to improve his teaching skills in order to become an effective instructor.

Theme 05. Teaching is a hard and difficult process.

Ten participants described teaching as a *hard*, *difficult* and a *complicated* process. They argued that the teacher should understand the whole classroom. They added that he is responsible for the learning of his learners. Furthermore, he should focus on the *learners’ needs* and understand them one by one. In addition to this, the teacher should *manage his classroom* and this is not always easy to be done. All these and more are troubles that the teacher has to face and challenge; what make the process of teaching complex and difficult.

“*This is why I prefer to leave it for the ones who are able to do it*” is the concluding statement given by one of the participants. One of these participants put it clearly that he does not like teaching because of its difficulty. He argued that he is not worthy of this responsibility. However at the end of his paragraph, he assumed that teaching needs serious work and he is ready for the challenge. To put it short, one participant stated that teaching is easy for those who know how to do it. And another one summarized his point of view as “*Teaching is a heart job, but a hard work*”.

Theme 06. Teaching is boring.

Only one participant chose to describe the process of teaching as *boring*. This is shown in his answers to the questionnaire in which he stated that he was obliged to do TT and he chose it because there is no other choice. He justifies his response by the fact that the teacher is *repeating* the same instructions all the time. Another one stated that teaching is a noble job, but he is not interested in it.

Through the analysis of the participants’ diaries, we have collected valuable qualitative data about the participants’ opinions and points of view about teaching. Some of the participants provided objective responses through the description of the process of teaching in general. Others preferred to talk about their personal outlooks and attitudes.

III.2. Question 02. Did the student teachers adopt action research method in their teacher training courses? How?

Through the answers of this question, we assume that all the participants adopted action research method in their teacher training. The responses to this question are divided into three themes. These themes summarize the six steps of action research method discussed in the literature review. The themes are: the difficulties faced by the participants, the actions applied as solutions, and the evaluation of the actions.

Theme 01. The difficulties faced by the participants

During their teacher training, the participants have faced several difficulties and challenges. In the diaries, four difficulties have been mentioned by the participants as follows:

Lack of interaction, concentration and attention: The words describing these difficulties differ but the idea is the same. Nine participants argued that they experienced the challenge of attracting the pupils’ attention, concentration and interest in their classroom. “*Although I use*

simple words, gestures and interested examples, the result is always the same; no interaction, no interest"; this is how a participant chose to describe the difficulty he faced. They argued that the pupils are not *responsive* and do everything to *avoid interaction*; it happens even when the questions are clear and they know the answer; they are the entire time *silent*. The pupils are neither *concentrated* nor *interested*. Another participant argued that the pupils are *talkative* and they do not pay attention to the course. To add, the pupils are *not motivated*, and the teacher was the only one speaking in the classroom. The pupils are *physically* in the classroom but *mentally* absent. One ST preferred to describe the pupils as "*Hyper active*" to refer to their lack of concentration and interest.

Difficulties with the pupils' behavior: Another major difficulty discussed by ten participants is the pupils' behavior. Different interventions describing the pupils but they can be all put under one title "*pupils' misbehavior*". Most of the participants claimed that the classrooms are *noisy* and the pupils speak *too much*. They *disturb* not only the teacher but also their classmates. One participant expressed that the pupils *speak anything* in the classroom without *any respect*. Moreover, they are *disruptive* and *talkative*. They do not bring the needed material into the classroom (Books, copybooks...); they are not interested in making their exercises neither their homework.

Difficulties in classroom management: The previous mentioned problems are concerned the pupils. The following are related to the challenges faced by the participants in their performances as teachers. One participant experienced difficulties related to *pupils' understanding*. He argued that finding the appropriate words to successfully transmit the message was not easy. Two others highlighted the problem of management. Controlling the classroom was a challenge for some participants. Managing the classroom discussion, finishing the lesson delivery in time and others are other problems raised in the diaries. One of the participants have observed the missing of the platform in the classroom and considered this fact as a problem. He confirmed that classroom management is hard without the platform. Managing time was also raised as an issue. A participant expressed his difficulties in managing time. He ensured that, in his first presentations, the lesson was not completely delivered as it was planned. Only one participant considered his affective side as a challenge. He argued that stress and hesitation caused him some troubles prevent him from conducting his role as a teacher in the appropriate manner.

Low language level: The participants expressed that the pupils have a low level in language skills. One participant stressed the grammatical level. He mentioned that, during the activities,

the pupils mix between the tenses and make mistakes in conjugation. Another participant stressed another idea concerned the *critical thinking*. He argued that the pupils don't make efforts to be *original* and *creative*; they don't think in a critical manner and more importantly, they are limiting themselves to what the teacher is saying without giving their personal point of view and interpretation. Another participant stated that the learners' differences were a challenge for him during his teacher training. He finds it tricky to achieve the right way and select the appropriate method to make all the pupils understand the content delivered.

Theme 02. The actions applied by the student teachers as solutions

In their teacher training, to deal with the different problems, the student teachers have planned for different actions applied as solutions. The actions are explained under the same themes summarizing the problems. Each problem is accompanied with the action suggested and applied.

Lack of Interaction, concentration and attention: the problem is the same but the solutions vary from one participant to another. About five participants agreed that the pupils need to be provided with interesting up dated topics and examples to be used in the classroom to raise their motivation, stimulate their interest and attract their attention. One of them gave an example of providing topics about philosophy to the pupils of literature and philosophy. Others stressed the paramount importance of collaborative learning and group work to increase interaction in the classroom. Integrating the new technologies into the classroom was one of the actions adopted by some participants. In teaching civilization at University, the student teacher claimed that teaching with videos and data show is necessary to awaken the students' interest and motivation. Another student teacher conducted a pilot questionnaire in classroom to understand the reasons behind the lack of motivation and interest among the pupils. He planned for some techniques based on the pupils' needs and lacks. He opted for rewards as a motive to make the pupils more interactive.

Problems with the pupils' behavior: Dealing with the pupils' misbehavior is not something easy to do as asserted by some participants. To achieve this goal, one participant has planned for applicable techniques and acts. According to him, creating a cool, *humoristic*, and enthusiastic classroom environment is the key success behind stimulating pupils' interest and motivation. Some of the techniques he applied are:

- **Raising one hand:** an applicable technique to make the pupils stop talking and concentrate on the teacher. *“Each time I did this, they focus their attention to me thinking that I’m doing to say or do something”*
- **Using two colored cards:** to punish the pupils a yellow and red cards are used. Instead of warning the pupils, the participant shows the yellow card for the disturbing pupil as a first warning and the red card as the second and punishing warning.
- **Clapping the hands:** to automatically attract the pupils’ attention to concentrate on the lesson.

Two other participants argued that punishment is the only helpful action in this situation. “Mince points” is the common action applied by many participants facing the problem of pupils’ misbehavior. Another solution could be the creation of friendly, kind relationship with the pupils.

Difficulties in classroom management: The participant who dealt with time management planned for systematic action to arrive at finishing the lesson in the time allotted. The lesson lasts one hour; he divided the lesson into four parts as follows:

Table 14. *Lesson parts division and their period of time.*

Lesson Parts	Time devoted for each part
Warm Up	05 to 10 minutes
Presentation	20 to 30 minutes
Practice	10 minutes
Discussion	10 minutes

He determined the time devoted for each part, and left ten minutes at the end of each session for his pupils to ask questions and to discuss the misunderstood matters. Another participant found that the presence of the platform in the classroom fundamental to manage classroom control. He asserted that he suggested this solution to the co-operative teacher and other school staff. To deal with the stress he felt, the participant challenged by this difficulty argued that he tried to be more relaxed by controlling his behavior and raising his self esteem.

Low language level: To deal with the grammatical deficiencies, the participant has chosen to apply the principles of Grammar Translation Method in his classroom. He asserted that he prepared for his pupils a list of the basic grammatical rules. He asked them to learn

them and then make some practices and activities. Concerning the problem of critical thinking, the participant planned for a series of actions that aim at fostering interaction, raising motivation and encouraging the pupils to be more critical and reflective; through *amalgamating* the learners into small groups, and giving them interesting, concrete and real life themes.

Theme 03. The evaluation of the actions

Twenty four student teachers have managed to fully adopt action research method. At the evaluation stage, twenty two of them argued that positive changes have been observed, and the actions applied seem to be fruitful. The other two STs put that their action was successful in some classes but not others. The remaining four participants did not arrive at completing their investigation. Because they did not apply the action planned, no evaluation could be made.

III.3. Question 3. How do the student teachers evaluate their teacher training process?

At the end of the teacher training process, the student teachers evaluated their experience differently. Almost all the participants (27) commented on their teacher training period as successful and beneficial experience. However, three of them criticized the short period of time devoted to their teacher training and considered it as a limitation that prevented them to fully take the advantage from the process. Only one participant described his process of teacher training as boring without any justifications or illustrations.

Sixteen student teachers affirmed that, through this experience of teacher training, they have learned many new things about teaching, the pupils' behavior and attitudes, and the classroom environment. In their writings, they described some of what they have noticed, observed and learnt about the process of teaching. Most of them agreed on the fact that teaching is not an easy task to do; hence, it needs preparation, willingness, patience, and hard work. They asserted that teacher training process is primordial to help the student teachers acquire the basic principles and skills of teaching. One of the student teachers linked between his study life and his training. He asserted that what he has learned as teaching methods and techniques have really helped him perform perfectly in his teacher training.

In their conclusions, almost all the participants expressed their feeling and attitudes toward teaching. Twenty six student teachers stated it clearly that it was a *great*, enjoyable, *wonderful*, *unforgettable* and *amazing* experience. It provided them with opportunities to test

their capabilities and understand what teaching really is. What is repeated in their responses is that they understood that teaching is a hard process that needs efforts and sense of responsibility. *“Now, I feel that I really want to be a teacher”*; one argued that, at the beginning of his teacher training period, he did not feel good, but at the end he liked teaching and became more interested in it. He chose to close his production stating that he really enjoyed it and he is excited to enter the domain of teaching.

Four participants preferred to comment the action research method and how it helped them during their teacher training. Understanding classroom problems was experienced and it is really helpful to improve the teaching performance as stated by one of the participants. *“I moved from thinking as a student to thinking as a teacher”*. This is the introductory statement of one of the participants who expressed that he really enjoyed his experience. This proves that the participants are more reflective about their teaching. He illustrated citing some of the difficulties faced by the teacher; he found it necessary to investigate them to be overcome. *“I lived very exciting moment”*; this participant described his relationship with his pupils. He asserted that his adoption of action research method brought fruitful results. The pupils became more interactive, interested, and enjoyed his method of teaching. He expressed that this positive result was thanks to the actions he adopted.

Only one participant expressed his bother and bore during the teacher training process. Three student teachers shed light on some limitations challenged during their teacher training. Time was the first point stressed. They argued that the period of time given was not sufficient. They ensured that, with much time, the experience will be more beneficial, fruitful and powerful. Another participant mentioned the lack of material in the classroom as a limitation. All of them concluded that, even with these difficulties, their teacher training experience was well accomplished. *“If it is to do again, I will do it with great pleasure”* as put by one student teacher.

In the diaries, the student teacher reported qualitative data valuable for our research. Action research method was adopted by all the participants. However, it is worth mentioning that not all of them have completed the research. Besides, in their writings, most the participants showed that they became more interested on teaching. They all have the goal to be effective, reflective future teachers.

VII. Reflective Thinking Test Analysis

In this part, we show the results of the pre and post tests. The detailed results are presented both in frequencies and percentages. The test is divided into five factors which are: Continuous and purposeful thinking, Open-mindedness, effective teaching, being inquisitor, and finally prescient and frank. The mean scores and standard deviations of each of the five factors are compared.

VII.1. Pre-test/ post test results. In the following tables, the results of the pre-test and post test are reported in both frequencies and percentage. Brief interpretation is provided to the results obtained. Five tables are presented; each one shows the results of one of the five factors for both the pre and post tests.

Table 15: Comparison of the First Factor's Results: Continuous and Purposeful Thinking.

	Definitely Degree				Frequently Degree				Partly Agree				Frequently Disagree				Definitely Disagree			
	Pre-T		Post-t		Pre-t		Post-t		Pre-t		Post-t		Pre-t		Post-t		Pre-t		Post-t	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
S1	14	50	16	57,1	6	21,4	8	28,6	8	28,6	4	14,3	0	0	0	0	0	0	0	0
S2	8	28,6	8	28,6	9	32,1	10	35,7	6	21,4	5	17,9	2	7,1	3	10,7	3	10,7	2	7,1
S3	9	32,1	8	28,6	6	21,4	10	35,7	9	32,1	8	28,6	2	7,1	2	7,1	2	7,1	0	0
S4	15	53,6	15	53,6	7	25	12	42,9	6	21,4	1	3,6	0	0	0	0	0	0	0	0
S5	0	0	0	0	0	0	0	0	9	32,1	4	14,3	7	25	10	35,7	12	42,9	14	50

- Pre-T: Pre-Test

- Post-T: Post Test.

- N°: Number (Frequency)

- %: Percent

- S: Statement.

The first factor is “continuous and purposeful thinking”. Five statements are categorized under this factor. The statements reflect the student teachers’ thinking about their teaching, whether they have defined and planed purposes for their teaching or not. In what follows, we compare the findings obtained in the five statements for both the pre and post tests.

▪ **S1: I evaluate the effectiveness of my teaching:** In the pre test, fourteen participants among twenty eight strongly agree. (50%) of the student teachers strongly agree on the evaluation of the effectiveness of their teaching, six participants definitely agree, and eight partly agree. This is interpreted as a positive behavior and attitude. While in the post test results, the same interpretation could be given with a slight improvement. (57, 1%) of the participants strongly agree, (28, 6 %) frequently agree, and only (14, 3) of the participants

expressed that they partly agree. We conclude that the participants evaluate the effectiveness of their teaching both before and after the treatment. However, significant improvement is observed after the adoption of action research method.

▪ **S2: I ask other teachers for help about my teaching:** As it is shown in (table 15), there is a variance in the student teachers' responses both in pre and post tests. In the pre-test, (28, 6 %) of the participants definitely agree on asking other teachers for help about their teaching, (32, 1%) frequently agree, (21, 4%) partly agree, (7,1%) frequently disagree, and (10,7 %) of the participants show a definite disagreement about this act. We still assume that the responses are positive since most of the participants agree, and few student teachers disagree. In the post test, the same note is observed with considerable improvement. (28,6 %) of the participants strongly agree, (35,7) frequently agree, (17,9 %) partly agree, (10,7) frequently disagree, and (7,1) definitely disagree. We understand that most the participants are interested in understanding the teaching process, and are trying to improve their performance asking more professional people for help.

▪ **S3: I create new activities in the classroom:** remarkable difference is observed between pre and post test results. In the pre-test (32, 1 %) of the participants definitely agree on the fact of creating new activities in the classroom. The same percentage represents the participants who partly agree. (21, 4 %) of the student teachers frequently agree, and (7, 1 %) of the respondents disagree (frequently and definitely). Convergent results are shown in the post test. (28, 6 %) definitely agree, (35, 7 %) frequently agree, (28, 6 %) partly agree, and (7,1 %) frequently disagree. No participant shows a complete disagreement on creating new activities in the classroom after the adoption of action research method.

▪ **S4: I manage to encourage classroom discussion:** one of the qualities of a successful teacher is classroom management. In, specifically, managing classroom discussions, the results show that the student teachers are good classroom discussion managers in both before and after the treatment. However, a kind of improvement is shown in the post test results. Both in pre and post tests results, almost half of the participants (53, 6 %) definitely agree on the fact that they manage to encourage classroom discussion. The percentage increases after the treatment for the participants who frequently agree (from 25 % in pre test to 42, 9 % in post test). (21, 4 %) of the participants partly agree before the treatment and only (3, 6 %) of the student teachers partly agree after the adoption of action research method in the teacher training course. No disagreement is expressed in both pre and post test results.

▪ **S5: I do not value the opinions of my students:** A slight difference is observed between the results of the pre and the post tests. However, both the results show that the

participants value the opinions of their participants and disagree on the point of neglecting them. The results increased from (42, 9 %) to (50 %) for definitely disagree, (25 %) to (35, 7 %) for frequently disagree. And decreased from (32, 1 %) to (14, 3%) for partly agree. No frequent or definite agreement is expressed for the fact of neglecting the students' opinions in both pre and post tests.

Table 16: Comparison of the Second Factor's Results: *Open-Mindedness*.

	Definitely Degree				Frequently Degree				Partly Agree				Frequently Disagree				Definitely Disagree			
	Pre-T		Post-t		Pre-t		Post-t		Pre-t		Post-t		Pre-t		Post-t		Pre-t		Post-t	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
S6	12	42,9	17	60,7	6	21,4	7	25	5	17,9	4	14,3	5	17,9	0	0	0	0	0	0
S7	11	39,3	12	42,9	10	35,7	12	42,9	7	25	4	14,3	0	0	0	0	0	0	0	0
S8	3	10,7	0	0	3	10,7	1	3,6	6	21,4	5	17,9	5	17,9	9	32,1	11	39,3	13	46,4

The second factor is open-mindedness. Three statements are grouped under this factor. The statements reflect the student teachers' open-mindedness concerning their teaching and the way they deal with their classrooms. In what follows we interpret the results of each statement comparing them before and after the treatment.

- **S6: I'm open to the pupils' suggestions, responses and questions:** an important difference is shown in the results before and after the treatment. The percentages increased from (42, 9 %) to (60, 7%) for definitely agree, and (21, %) to (25 %) for frequently agree. And decreased from (17, 9 %) to (14, 3 %) for partly agree, and from (17,9) % to (0%) for frequently disagree. This explained by the fact that the participants show more interest to the pupils' insights after the treatment.

- **S7: I take into account pupils' expectations:** A difference is observed concerning taking account the pupils' expectations. The results increased from (39, 3 %) to (42, 9 %) for definitely agree, and from (35, 7 %) to (42, 9 %) for frequently agree. However, they decreased for partly agree from (25 %) to (14, 3 %). No disagreement is shown in both tests.

- **S8: I'm not responsible of the pupils' emotional behavior:** The responses vary between the participants, and important change occurred after the treatment. The percentages increased from (39,3 %) to (46,4 %) for definitely disagree, (17,9 %) to (32,1%) for frequently disagree, and decreased from (21,4 %) to (17,9 %) for partly agree, (10,7) % to (3,6 %) for frequently agree, and from (10,7 %) to (0%) for definitely agree.

Table 17: Comparison of the Third Factor's Results: *Effective Teaching*.

	Definitely Degree				Frequently Degree				Partly Agree				Frequently Disagree				Definitely Disagree			
	Pre-T		Post-t		Pre-t		Post-t		Pre-t		Post-t		Pre-t		Post-t		Pre-t		Post-t	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
S9	9	32,1	12	42,9	7	25	8	28,6	5	17,9	5	17,9	4	14,3	2	7,1	3	10,7	1	3,6
S10	15	53,6	17	60,7	8	28,6	7	25	5	17,9	4	14,3	0	0	0	0	0	0	0	0
S11	11	39,3	17	60,7	8	28,6	7	25	9	32,1	4	14,3	0	0	0	0	0	0	0	0
S12	0	0	0	0	5	17,9	2	7,1	9	32,1	5	17,9	8	28,6	10	35,7	6	21,4	10	39,3

The third factor is effective teaching. Five statements are included in this factor. The interest in this factor is showing whether the student teachers have improved their teaching and become effective after the adoption of action research method or not. In what follows, we interpret the results of each statement comparing them before and after the treatment.

- **S9: I introduce new material into the classroom:** slight improvement is shown in (table. 17). In the pre-test, (32,1 %) of the participants definitely agree on the fact of bringing new material to the classroom; while, in the post-test the results increased to (42,9 %). The same note for frequently agree. No difference is shown in partly agree; the percentage remains the same (17, 9 %). For frequently disagree the scores decreased from (14, 3 %) in pre-test to (2, 1 %) in post test. And for definitely disagree, they decreased from (10, 7 %) to (3, 6 %).

- **S10: The effective delivery of the lesson is my primary objective:** The scores show that both before and after the treatment, the student teachers have as an aim effective delivery of the lesson. However, the scores show an improvement between pre and post test results. The scores increased from (53, 6 %) in the pre-test to (60, 7 %) in post test for definitely agree. And decreased from (28, 6%) to (25 %) for frequently agree, and from (17, 9 %) to (14, 3 %) for partly agree. No disagreement is expressed for this point.

- **S11: I give importance to cooperative learning:** student teachers' attitudes towards cooperative learning captivantly changed before and after the treatment. The scores of the test show an important upsurge. They increased from (39, 3 %) in pre-test to (60, 7 %) for definitely agree and decreased from (28, 6%) to (25 %) for frequently agree, and from (32, 1%) to (14,3 %) for partly agree.

▪ **S12: I do not have critical perspectives:** for this statement, appealing changes brought up. The STs' critical perspectives are promoted in which the scores increased from (21, 4) % to (39, 3) for definitely disagree on not having critical perspectives, And from (28, 6 %) to (35, 7%) for frequently disagree. However, the scores decreased from (32, 1) % in pre test to (17, 9 %) in post test for partly agree, and from (17, 9 %) to (7, 1 %) for frequently disagree. No definite agreement is expressed for both tests.

Table 18: Comparison of the Fourth Factor's Results: Being Inquisitor.

	Definitely Degree				Frequently Degree				Partly Agree				Frequently Disagree				Definitely Disagree			
	Pre-T		Post-t		Pre-t		Post-t		Pre-t		Post-t		Pre-t		Post-t		Pre-t		Post-t	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
S13	11	39,3	20	71,4	8	28,6	8	28,6	9	32,1	0	0	0	0	0	0	0	0	0	0
S14	13	46,4	17	60,7	8	28,6	7	25	7	25	4	14,3	0	0	0	0	0	0	0	0
S15	14	50	16	57,1	8	28,6	6	21,4	4	14,3	6	21,4	2	7,1	0	0	0	0	0	0
S16	8	28,6	17	60,7	6	21,4	10	35,7	10	35,7	1	3,6	4	14,3	0	0	0	0	0	0

The fourth factor is being inquisitor. The aim is to identify whether the student teachers have developed their inquiry capabilities after the adoption of action research method in their teacher training courses or not. Four statements are included in this factor. In what follows, we report the results of the pre and post test in frequencies and percentages.

▪ **S13: I think of the changes I made in the teaching process:** evaluating own changes made in the teaching process is a point of interest in this factor. At the outset, we notify that a great appealing change is made by the student teachers when comparing the scores of pre and post tests. The scores increased from (39, 3%) in the pre-test to (71, 4 %) in the post test for definitely agree, and decreased from (32, 1 %) in the pretest to (0%) in the post test for partly agree. The same scores are presented for frequently agree (28, 6).

▪ **S14: I'm interested in finding solutions to classroom problems:** for this statement, as well, the scores show that the student teachers become more interested in finding solutions to classroom problems. The scores increased from (46, 4 %) to (60,7%) for definitely agree, and decreased from (28,6 %) in pre-test to (25 %) in post test for frequently agree, and from (25 %) to (14,3 %) for partly agree. It is worth mentioning that the results are logical since the

treatment they were exposed to, was adopting action research method which has as first aim investigating classroom problems.

▪ **S15: I evaluate my teaching in a successive way:** for the statement, a note worthy change is noticed, the scores increased from (50%) in the pre-test to (57, 1 %) in the post test for definitely agree. They decreased from (28, 6 %) to (21, 4) for frequently agree, and from (21, 4 %) to (7, 1 %) for partly agree, and from (7, 1 %) to (0%) for frequently disagree. No total disagreement is shown in both test scores.

▪ **S16: I make efforts to improve my teaching performance:** regarding making efforts to improve teaching performance, significant and interesting change is noticed. The scores greatly increased from (28, 6 %) in pre-test to (60, 7 %) in post test for definitely agree, and from (21, 4 %) to (35, 7 %) for frequently agree. On the other hand, the scores decreased (35, 7 %) to (3, 6 %) for partly agree, and from (14, 3 %) to (0%) for frequently disagree. No total disagreement is shown in both test scores.

Table 19: Comparison of the Fifth Factor's Results: Prescient and Frank.

	Definitely Degree				Frequently Degree				Partly Agree				Frequently Disagree				Definitely Disagree			
	Pre-T		Post-t		Pre-t		Post-t		Pre-t		Post-t		Pre-t		Post-t		Pre-t		Post-t	
	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%	N°	%
S17	6	21,4	9	32,1	5	17,9	8	28,6	9	32,1	11	39,3	5	19,7	0	0	3	10,7	0	0
S18	4	14,3	10	35,7	11	39,3	10	35,7	8	28,6	5	17,9	5	17,9	3	10,7	0	0	0	0
S19	10	35,7	13	46,4	9	32,1	7	25	4	14,3	5	17,9	0	0	1	3,7	5	17,9	2	7,1
S20	4	14,3	1	3,6	1	3,6	0	0	7	25	1	3,6	3	10,7	8	28,6	13	46,4	18	64,3

The last factor is about being prescient and frank. We aim to show the student teachers' attitudes about their teaching. Being frank and prescient in the own teaching is the subject of interest. How the participants changed their attitudes is answered providing the percentages of each statement.

▪ **S17: I give responsibility to the pupils in learning:** considerable change is shown by the scores for the fact of giving responsibility to the pupils' in their own learning. The student teachers' responses vary and cover the five grading items. The highest percentage is for partly agree for both the pre and post test. However, it is increased from (32, 1 %) to (39, 3 %). For

definitely agree and frequently agree, the scores increased from (21, %) to (32, 1 %) and from (17, 9%) to (28, 6 %) respectively.

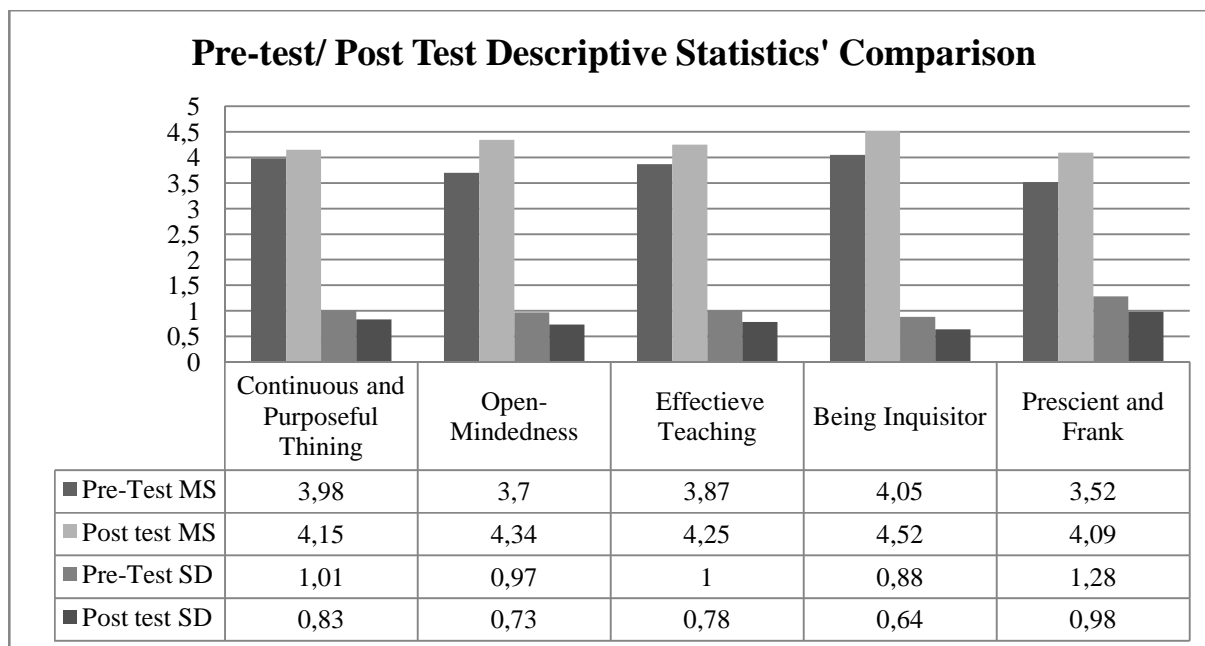
▪ **S18: I benefit from the constructive criticism of other teachers about teaching:** significant change is discerned for this statement. The scores increased from (14, 3 %) in the pre-test to (35, 7 %) in the post test for definitely agree, and decreased for the other grading items. The scores decreased from (39, 3 %) in pre-test to (35, 7 %) in post test for frequently agree, from (28, 9 %) to (17, 9 %) for partly agree, and from (17,9 %) to (10,9 %) for frequently disagree. No definite disagreement is expressed for both tests.

▪ **S19: I found the exchange of views with other trainees beneficial:** A change is noted. The scores increased for definitely agree from (35, 7 %) in pre-test to (46, 4 %) in post test, and for partly agree from (14, 3 %) to (17, 9 %), and decreased for frequently agree from (32, 1 %) to (25%). This could be interpreted by the fact that some student teachers conduct their teacher training individually with no other trainee with the same supervisor. The scores increased from (14, 3 %) to (17, 9 %) for partly agree, from (0 %) to (3, 7 %) for frequently disagree, and decreased from (17, 9 %) to (7, 1 %) for definitely disagree.

▪ **S20: I do not like teaching:** the last statement is about the student teachers' attitudes and opinions about the teaching process in general, whether they like it or not. Significant change and improvement is determined. The scores show that the student teachers changed their opinions about teaching. The scores increased from (46, 4 %) in pre-test to (64, 3%) in post test for definitely disagree, and from (10, 7 %) to (28, 6 %) for frequently disagree. However, they decreased for partly agree from (25 %) to (3, 6 %), frequently agree from (3, 6 %) to (0 %), and definitely agree from (14, 3 %) to (3, 6 %).

To conclude, the scores of twenty statements are compared. As shown by the frequencies and the percentages, positive changes have been made by the student teachers' after the treatment which is adopting action research method in their teacher training course. We assume that this change is due to action research method.

VII.2. Pre-Test/ Post Test Descriptive Statistics' Comparison. To illustrate, we provide the following graph which compared the mean scores (MS) and the standard deviations (SD) (descriptive statistics) of the pre and post tests for each of the factors.



Graph 06: Comparison of the pre and post tests' Descriptive Statistics for each Factor.

▪ **Continuous and Purposeful Thinking:** As it is shown in (Graph 06), the participants have attained a degree of progress in their continuous and purposeful thinking. This is well expressed by the participants' mean scores which increased from MS = 3, 98 and SD = 1, 01 in pre-test to MS = 4, 15 and SD = 0, 83 in post-test.

▪ **Open-mindedness:** It is clearly observed that the student teachers become more open-minded after the adoption of action research method in their teacher training course. The mean scores increased from MS = 3, 7 and SD = 0, 97 in the pre-test to MS = 4, 34 and SD = 0, 73 in post-test.

▪ **Effective teaching:** as it is shown in (Graph 06), the student teachers have improved their teaching effectiveness. This is clearly reported by the mean scores which are increased from MS = 3, 87 and SD = 1 in the pre-test to MS = 4, 25 and SD = 0, 78 in the post-test.

▪ **Being inquisitor:** This is the most important factor to be analyzed in our research. Since the student teachers have adopted action research as a method of inquiry, it is logical to find that they have promoted their inquiry abilities. This is clearly shown in (graph 06). The mean scores increased from MS = 4, 2 and SD = 0, 9 in the pre-test to MS = 4, 43 and SD = 0, 7 in the post-test.

▪ **Prescient and frank:** The last factor in our test is about being prescient and frank concerning own teaching. The same as the previous factors, the student teachers mean score results in improvement from MS = 3, 1 and SD = 1,28 in the pre-test to MS = 3,15 and SD = 1,01 in post-test.

To sum up, in all the factors, the mean scores increased. This means that the student teachers have promoted their reflection on their future teaching after they have adopted action research method in their teacher training. This improvement is demonstrated in the five factors of the test. The standard deviations are smaller after the treatment. This means that they are more concentrated on the means. The small standard deviation is the goal in this situation. We interpret this by the fact that the student teachers' responses became closer to each other after the treatment.

In this section we reported the detailed data obtained from the research tools. We interpreted the results of the pilot questionnaire using percentages. Moreover, we analyzed the written responses for the semi-open questions. The mean scores and the standard deviations of the pre-test/ post test results are compared, after the detailed interpretation of the scores obtained from the tests. Significant qualitative data is reported and described in details from the focus group discussions and the action research diaries.

Section Three: Discussion of the Results

In this section, the results and the findings obtained from the pilot questionnaire, the focus group, the Diaries and the scale are discussed. We determine whether the hypothesis is confirmed or infirmed. We also identify whether we arrived at achieving the intended objectives of the study or not. Hence, the results of each tool of research are discussed. In addition to this, validity, reliability and triangulation of research are discussed.

I. Pilot Questionnaire

Through the pilot questionnaire, we gathered valuable data related to our participants and the teacher training process in Algeria. Our sample is taken from second year Master of Didactics and the average age is 24 years old.

All the participants intended to embark in the domain of teaching. They chose to study Didactics of English by their own and they make all efforts to improve their teaching performance. One of these efforts is their personal choice to conduct teacher training since one of the major aims of teacher training is to help student teachers develop their teaching skills (Creemers, Kyriakides, & Antoniou, 2013). Hence, all of the participants have chosen to conduct teacher training by their own.

The participants expressed that the way teacher training is conducted in our public educational institutions is not helpful. They affirmed that the period of time given to this process is short and limited. The student teachers need much time in the classrooms guided by serving teachers to reach the intended outcomes from the process (Wikin, 1996). In their teacher training, the student teachers' are not guided and they follow no program or specific method. The teacher training program should foster reflective thinking as an important aspect of improving practitioners' teaching abilities (Mamluk-Naaman et al, 2006), and AR method is viewed as an important element throughout teacher preparation programs (Cohen & Waite-Stupaianky, 2012). Thus, we asked the participants to adopt action research as a method in their teacher training to reflect on their teaching.

The participants affirmed that the student teacher needs continuous evaluation and guidance from his supervisor in order to successfully conduct his teacher training. Most of them believe that this could not be achieved independently but rather dependently.

II. Focus Group

The aim of the three focus group sessions was to evaluate the well progress of the experiment.

In the first focus group session, we ensured that all the participants have well started their teacher training process. They reported valuable affective data about their feelings and attitudes toward their teacher training process. The participants described the classroom situation and reported detailed information about the teacher's method and the pupils' behavior.

In the second focus group session, we ensured that all the participants have started the adoption of action research method in their teacher training course. They discussed several problems faced in the classroom. Moreover, the participants provided detailed descriptions about some actions that can be applied as solutions to deal with the challenges encountered.

The last focus group session revealed that most of the participants enjoyed their teacher training process. They expressed their satisfaction about the experience. They affirmed that adopting action research method in their teacher training pushes them to think as real teachers. Thus, action research enhances the statue of the researcher's reflective attitude (Wolodzko, 2008). Some of them expressed that they changed their points of view about teaching. They now see teaching as an interesting job that exceeds the barriers of knowledge transmission and provision. And so, action research method creates a favorable environment for teaching to be interesting (Denicolo, & Kompf, 2003).

Through the focus group sessions' findings, we understand that our participants have promoted their reflection on their future teaching. They become more reflective and interested to understand more about the teaching process and this is one of the major aims of our study.

III. Action Research Diaries

The aim of the action research diaries is to prove that the participants have applied action research method in their teacher training courses. This aim is well identified through the diaries returned back. All the participants have applied action research method. However, not all of them have finished the investigation in their teacher training.

All the participants started the action research method by investigating some problems faced in the classroom. In the diaries, all the participants have identified one problem to deal with. The process of adopting action research method continued by making researches to understand the problem. Some of the participants reported that they discussed the difficulties with their supervisors and more experienced persons in the domain. All the participants progressed in the process by planning for the action. They all suggested actions as solutions to be applied to deal with the problem. Unfortunately, because of time limitation, not all the participants have applied these actions to evaluate their effectiveness. Four (04) participants from twenty eight (28) did not find time to apply their actions in their classroom. For the participants who continued their investigation, most of them expressed that their actions were successful and brought fruitful results and positive changes.

Findings from dairy data interpretations revealed that the experiment was successfully conducted by the participants. We, thus, assume that our experimental study is fully accomplished.

IV. Reflective Thinking Test

Pre and post tests are adopted to compare the results. The findings show that the participants have promoted their reflective thinking after the adoption of action research method in their teacher training courses. What do we need as an outcome from the teacher training programs is building reflective teachers since these latter are more effective teachers (Grant & Zeichner, 1984)

In this section, we reported the results and the findings obtained through four research tools. Interesting results are obtained. These results serve to our study and confirm our previous hypothesis. The following points summarize the results obtained:

- The way teacher training is conducted is not helpful for student teachers to improve their teaching. This is because of the limited period of time and the lack of guidance and evaluation.
- Action research method is successfully implemented by the student teacher in their teacher training courses.
- Student teachers' reflective thinking is promoted after the adoption of action research method.

To conclude, teacher training programs in Algeria need to be improved and skilled. They lack a program to be followed. The student teachers need to be guided and evaluated in their teacher training process. This is fundamental in order to help them to reflect on and improve their teaching. Hence, our hypothesis is confirmed. Action research is a method of inquiry that could be adopted by teachers and student teachers to investigate the several classroom problems. Action research is helpful to promote teachers' and student teachers' reflective thinking.

V. Validity

Internal validity is the degree to which a study provides a good test of causal hypothesis, where alternative explanations of data can be ruled out (McBridge, 2010). In our study, we opt for a pre-experimental design. We ensured the total manipulation of the independent variable. Action research method is applied by all the participants. In terms of validity, one question could be asked. Are the results obtained (promoting the student teachers' reflective thinking) due to action research adopted or due to the process of teacher training in general? Hence, we notify that the pre-test was addressed after the starting of the teacher training process, before the implementation of action research method. However, the post test was addressed at the end of the teacher training process and the adoption of the action research method. Thus, we assume that the results obtained are due to the adoption of action research method. Second, our use of pre-experimental design is valuable despite the limited degree of internal validity (Rubin, & Babbie, 2011). What makes it valuable is the use of pilot study for the purpose of identifying obstacles in carrying out methodological aspects of a more internally valid design (Rubin, & Babbie, 2011). We claimed that action research is among many other methods that could be adopted by the student teachers to promote their reflective thinking. In adopting a true or quasi experimental designs, we can find that both the experimental and control group promoted their reflection on their future teaching. For the experimental group, it would be due to action research, and for the control group, it would be due to another method they have applied in their teacher training. External validity refers to the extent to which the results can be generalized from samples to population (Nunan, 1992). We would say that our sample is representative of the population since it is randomly chosen and represents (10%) of the population. This permits us to generalize the results to the whole population (280).

VI. Reliability

In quantitative research, reliability in data collection is assured in three ways: measuring internal consistency, applying test-retest correlation coefficients, and using equivalent forms of instrument (Benz, & Newman, 1998). Accordingly, our measurement of the internal consistency shows a positive value. This is through the measurement of the reliability statistics in which we find that Cronbach alpha coefficient (.88 and .90) calculated for the pre and post tests respectively demonstrates high degree level for the tool. Moreover, Using SPSS guarantees objectivity and consistency.

For the qualitative instruments, no guarantee for the reliability of the tools could be given except for the fact that there is correlation between the results obtained from the questionnaire and the test, and those obtained from the diaries and the focus group discussions.

VII. Triangulation

Triangulation is the use of more than one imperfect data collection alternative in which each option is vulnerable to different potential sources of errors (Rubin & Babbie, 2009). Our study is founded on triangulation in data collection. We opt for a mixed methodology exploiting four different instruments for gathering both qualitative and quantitative data. The overriding purpose of triangulation is to increase the validity and the reliability of our study in addition to increase its comprehensiveness (Munhall, 2001). We used a questionnaire and a reflective thinking scale for quantitative data, and diaries and focus group for qualitative data.

Section Three

Limitations, Implications and Suggestions for Further Research

In this section, three points are stressed. We start by summarizing some limitations and challenges encountered throughout the study. We provide some implications and we finish by suggesting some recommendations for further research.

I. Limitations

Throughout the present study, when carrying out the research, several limitations are encountered. In what follows, we discuss the challenges and limitations faced all along the study. Most of the limitations encountered are methodological.

The most obvious limitation in the study is its pre-experimental design. It was difficult to conduct a true-experimental study or a quasi-one. The difficulty was to work with two groups, exploring their conditions, understanding the methods they apply and follow, and finally evaluating them during their teacher training process. This is why we opt for a pre-experimental design.

The second limitation was in the use of the questionnaire. The questionnaire may fail to reveal the real attitudes and views of our participants. It cannot guarantee the honesty of the participants in their responses. This is shaped by the fact that some responses from some respondents are contradictory.

As a third limitation, observation is crucial and can be powerful, flexible and 'real' as a research tool (Moyles, 2007). But because of the limitation in time, we could not implement it as a tool of research, since it was difficult to observe twenty eight participants conducting their teacher training in different schools. As an alternative, we used research dairies.

Another difficulty faced concerns the focus group. Three focus group sessions were conducted, but not all the participants have taken part in these sessions. Limitations in time and space made the process of meeting all together impossible. Finding one day in which all the participants will be free was a challenge. Therefore, we used Facebook as a virtual focus group.

Furthermore, the strike lasted three months, and this affected our experiment. The Strike took place at University; thus, the students were not assigned in their training locations in

time. It was limited to a short period of time. Instead of starting our experimentation in the beginning of February, we started it in March, 15th. Adopting action research method during a longer period of teacher training could lead to more reliable and valid results. Thus, there would be more possibility to generalize the results.

Finally, when carrying out the experiment which consists of adopting action research method in the teacher training course by the student teachers, not all the participants managed to accomplish their investigations. Because of some uncontrollable limitations and challenges, few participants (4 among 28) did not deal with all the steps of action research method in their investigations.

II. Implications

Our main aim of this study is to confirm the hypothesis that action research method could be helpful to promote student teachers reflective thinking. However, through the results obtained, a number of implications are addressed to benefit from the findings of this study. These implications are summarized as follows:

II.1. Changing student teachers views and perceptions on the process of teaching.

From our results, many student teachers argued that teaching is a hard and difficult process. Changing this view and perception is crucial. How to challenge these difficulties in teaching and finding the appropriate teaching methodology can be one of the basic solutions to overcome teaching intricacies.

II.2. Providing guidance to the student teachers during their teacher training.

Student teachers in their teacher training are still learning; thus, guidance from their supervisor is imperative. Without guidance the student teachers find themselves between several decisions. Only a more professional guide (teacher supervisor) could provide them with the necessary instructions and guidance to make the right decision.

II.3. Integrating a formative and summative evaluation of teaching improvements into teacher training.

How can a student teacher promote his teaching abilities and skills without evaluating the changes and the improvements he made? A formative and summative evaluation should be a part of the teacher training process. This evaluation can be made either by the student teacher himself or by the teacher supervisor or by both. The evaluation of the improvements realized

could be a motive to the student teacher. Besides, due to the evaluation, the wants, the lacks and the necessities of the student teacher in his teacher training course might be clearly defined.

II.4. Encouraging the student teachers to reflect on their practice and their future teaching.

As shown in the results, action research as a method of inquiry and investigation is one of the powerful methods to help the student teachers reflect on their future teaching and practice. The student teacher finds himself in a real situation in which doors are opened to explore the different problems, issues and matters in the classroom. Accordingly, the student teacher will gain a clear idea about what teaching really is and find fundamental starting from which he will build his career as a future teacher.

II.5. Encouraging the student teachers to be independent, responsible and reflective.

Through the adoption of action research method in the teacher training course, the student teacher is encouraged to be independent, more responsible and reflective. The student teacher takes the responsibility of promoting his teaching skills and abilities, tries to understand classroom problems, and finds practical solutions to those problems. This process fosters his reflection on his future teaching.

II.6. Making the process of teacher training well organized.

Conducting teacher training without organization or defined program to be followed might be unbeneficial to meet the underlined objectives. The student teachers need to be provided with a distinct and clear program to be respected. What is the period of time needed, the approach and the method to be adopted, and the objective to be reached from the teacher training process? All these matters should be well systematized in a lucid schedule.

II.7. Making the student teachers understanding the classroom and introducing the concept of “Teacher as Researcher” into the classroom.

Through the application of action research, teaching is no more limited to the process of giving instruction to the pupils. The role of the teacher in his classroom touches several sides. The teacher is responsible for the entire classroom. It is of clear importance that the teacher should provide his learners with meaningful and significant instructions and knowledge, but

this could not be achieved if the different classroom issues have not been treated and the different problems have not been taken into consideration.

III. Suggestions for Further Research

For further research and studies, with new research procedures and in long enough period of time, the limitations mentioned above might be overcome. The following are some suggested recommendations:

First, it would be interesting to investigate the process of teacher training generally. What is the time needed to this process to reach the outcomes? What is the best method to be adopted? And others are all matters that should be put under the light to be explored and investigated.

Working with a larger sample will lead to more reliable and valid results, a sample that will not be limited to student teachers only but also pre-service and in-service teachers. As a matter of fact, generalizability will be achieved and established.

Additionally, investigating the role of the teacher supervisor might be of a paramount importance. How the teacher supervisor provides the necessary guidance for his student teachers. Moreover, his role as an evaluator and how this evaluation is established are fundamental matters for research in this field.

Concerning the concept of “Reflective thinking”, we mentioned before that action research method is one among many others that could lead to reflective thinking. Thus, exploring these method and to which extent they could promote teachers’ and student teachers’ reflective thinking is worthy of investigation.

Finally, it would be interesting to investigate the effectiveness of introducing the concept or “Teacher as Researcher” in our schools in building effective teachers. This is through the investigation of the role of the teacher as a researcher and how it could be powerful to help him understand his classroom to overcome the different difficulties he faces. His role is not limited to giving instructions and providing knowledge; but rather, a teacher and classroom manager who has as first goal, understanding classroom problems and trying to find their solutions. That is, a teacher who investigates his/her classroom and reflects on his/ her teaching process (style and strategies).

Conclusion

In this chapter, we provided the detailed data about the practical side of our research. Four sections are developed. The first methodological section summarized the methodology adopted. The second section was devoted to the analysis and the interpretation of the results obtained from the research tools. In the third section, the results were discussed. The last section was reserved to illustrate the limitations faced, the possible implications and suggestions for further research. We conclude from the results obtained that teacher training is a process that needs time and organization. The student teachers need to be guided by more professional teachers in their teacher training process. Action research method can be adopted by the student teachers in their teacher training to promote their reflective thinking.

General Conclusion

In this master thesis, we aim at investigating the effectiveness of action research as a method of inquiring in promoting student teachers' reflective thinking in teacher education. We hypothesized that action research method is effective as a method of inquiry to help student teachers reflect on their future teaching.

To understand the research variable, in one chapter divided into three sections, we provided a brief overview about the three variables: action research method, reflective thinking and teaching, and teacher education and training.

To confirm or infirm the hypothesis, we conducted a pre-experimental research. Our sample consists of 10% of the students of second year master of Didactics at University of Bejaia. The experiment was successfully conducted. It lasted two months in which valuable qualitative and quantitative data are reported.

To collect data, four research instruments are used. First, we addressed a pilot questionnaire in order to gather data about our participants' attitudes and opinions. Another aim of the questionnaire is to confirm the existence of the problem. Second, we adopted a scale for reflective thinking. A pre and post tests are addressed to compare the results to see if any changes have occurred. The third instrument is focus group. It is used in the research as a means of evaluation. We aim at evaluating the student teachers' good progress of the teacher training process; as well as, the well adoption of action research method. The last research tool used is action research diaries. The diaries are used as an alternative to observation. The participants are asked to write research diaries during their teacher training process. In the diaries, the progress of their action research is illustrated. The major aim of the diaries is to ensure that the participants have adopted action research in their teacher training.

Through the four research tools, valuable qualitative and quantitative data gathered. The analysis of the questionnaire and the test is made through the SPSS software. The important themes discussed in the focus group sessions are summarized. We categorized them into six themes. The diaries are analyzed taking into consideration three main points. The first one is about the student teachers' opinions about the process of teaching in general. The second one globes the different steps of the action research method. We ensured that all the participants have adopted it in their teacher training. The last point was about the evaluation of the teacher training process by the participants.

The data interpretation and analysis revealed several crucial results. From the questionnaire we confirmed the existence of the problem. The student teachers agreed on the fact that what they need to successfully accomplish their teacher training is a defined organized program and method to follow. They asserted that the teacher training process is conducted without organization, sufficient time, and guidance. Through the focus group sessions, we evaluated the student teachers process of teacher training and adoption of action research method. We guided them from the starting of the process till its end. The dairies confirm that the participants have well applied action research method in their teacher training. Finally the comparison of the pre and post test data revealed that the participants have promoted their reflective thinking after the adoption of action research method in their teacher training.

To sum up, our experimental research is successfully fulfilled. We confirmed our hypothesis. Hence, we assume that action research is a method of investigation and inquiry. It is mostly applied in the field of education. The teacher adopts action research method in his classroom to investigate the different teaching problems and difficulties. In teacher education and training, the student teachers need to have a defined program to follow. In this program, crucial points should be defined and clarified. The first point concerns the time. Teacher training is a process that intends to prepare student teachers to be effective teachers. Thus, it needs time to be accomplish this objective. The second point is about organization and evaluation. The student teachers need to be taught the basic knowledge and steps of the teacher training process before they start. They need to be evaluated and guided by professional teachers. The third point concerns the method to be adopted. Different teaching methods can be applied by the student teachers in their teacher training. Hence, choosing the appropriate method could lead to interesting outcomes. Action research as a method that empowers teachers and reinforces their inquiry skills and capabilities is effective for teacher and student teachers to help them reflect on their practice and their teaching.

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Scale

Semerçi, ç. (2007). *Developing a reflective thinking tendency scale for teachers and student teachers*. Firat University. The scale sent by professor Semerçi to the researcher in an E-mail on December 12th, 2014 in Turkish language and translated by the researcher.

Appendix 01: Pilot Questionnaire

University Abderrahmane Mira of Bejaia

Faculty of Arts and Languages

Department of English

Second Year LMD Students of Didactics, Section One & Two.

Pilot Questionnaire

Dear Students,

In this research work, we are interested in investigating the effects of the Action Research methods applied by the student teacher (the trainee) in his teacher training (Training) to help them reflect on their future teaching. We would like you to answer these questions anonymously and honestly. Please, use a cross (×) to indicate your chosen option, and specify your answer when needed. Your help is a contribution to this work.

Thank you in advance.

Part One: General Information.

1. Could you please answer these questions?

- Your Age:
- Your Full Name:
- Is Didactics of English your personal choice?

2. Where do you conduct your teacher training?

- University ☐
- Middle school ☐
- Secondary school ☐
- Private school ☐

3. Is doing “Training” your personal choice?

If yes, please specify the reasons behind your choice?

.....

.....

.....

Part Two: Students' Opinions on the Teaching and Teacher Training Processes.

4. Do you think that the way teacher training is conducted could be helpful to promote your reflection on your future teaching? - Yes - No

Please, explain why

.....

.....

.....

5. Do you apply a specific teaching method during your teacher training? - Yes - No

If yes, please mention it.....

6. Do you make efforts to improve your teaching performance? - Yes - No

If yes, please explain how

.....

.....

.....

7. According to you, how can the trainee develop his teaching skills during the teacher training period?

- Independently, autonomously ☐
- Dependently (Relying on the teacher supervisor) ☐

Please, justify your choice

.....

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.....

.....

Thank you.

Appendix 02: Reflective Thinking Scale

The Modified teachers' and Student Teachers' Reflective Thinking Scale

This scale is part of Master II research work. It's made in order to assess the student teachers' Reflective teaching. Please put a cross (×) to indicate your choice.

Full Name:	Age:
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Grading of the Scale:

- 01. Definitely agree.
- 02. Frequently agree.
- 03. Partly agree.
- 04. Frequently disagree.
- 05. Definitely Disagree.

Statement Grading	01	02	03	04	05
Continuous and Purposful Thinking					
I evaluate the effectiveness of my teaching					
I ask other teacher for help about my teaching					
I create new activities in the classroom					
I manage to encourage classroom discussion					
I do not value the opinions of my students					
Open-mindedness					
I'm open to the pupils' suggestions, responses and questions					
I'm not responsible of the pupils' emotional behavior					
I take into account pupils' expectations					
Effective Teaching					
I introduce new material into the classroom					
I give importance to cooperative learning					
I do not have critical perspectives					
The effective delivery of the lesson is my primary objective (My own)					

The Teacher as a Researcher					
I think of the changes I made in the teaching process					
I'm Interested in finding solutions to classroom problems					
I evaluate my teaching in a successive way (My own)					
I make efforts to improve my teaching performance (My own)					
Foresighted and Sincere					
I benefit from the constructive criticism of other teachers about teaching					
I found the exchange of views with other trainees beneficial					
I do not like teaching					
I give responsibility to the pupils in learning					

Appendix 03: Action Research Course

University A-Mira, Bejaia

MII Pre-Experiment

Faculty of Arts and Languages

Experimental Group: MII Year, Didactics

Department of English

Topic: Introduction to Action Research

Experimenter: Samia MAAFA

E-mail: Samia.Maafa@yahoo.fr

Session One: Action research, definition, principles and steps.

Topic: Action research, definition, principles and steps	Class Level: MII year, Didactics	Time: 1 Hour	Date: April, 05 th , 6 th , 2015
Lesson Objectives: at the end of the lesson, the students will: <ul style="list-style-type: none">- Understand action research and its principles- Understand different steps of action research- Be able to apply action research in their training courses			
Material: Handouts, Online instructions			
Presentation	Practice	Evaluation	
<ul style="list-style-type: none">• Explicit explanation of the course elements	<ul style="list-style-type: none">• The students will be asked to apply Action Research method in their teacher training course	<ul style="list-style-type: none">• A formative and summative evaluation will be conducted when action research method is applied	
LessonOutline			
Session One: Introduction to the writing skill <ul style="list-style-type: none">❖ Element One:Action research and its principle. Aim: Understanding action research and its principles❖ Element Two:Explaining Steps of action research with examples. Aim: Being able to apply action research in their teacher training courses❖ Task: Apply action research method in your teacher training with its six steps			

Action Research

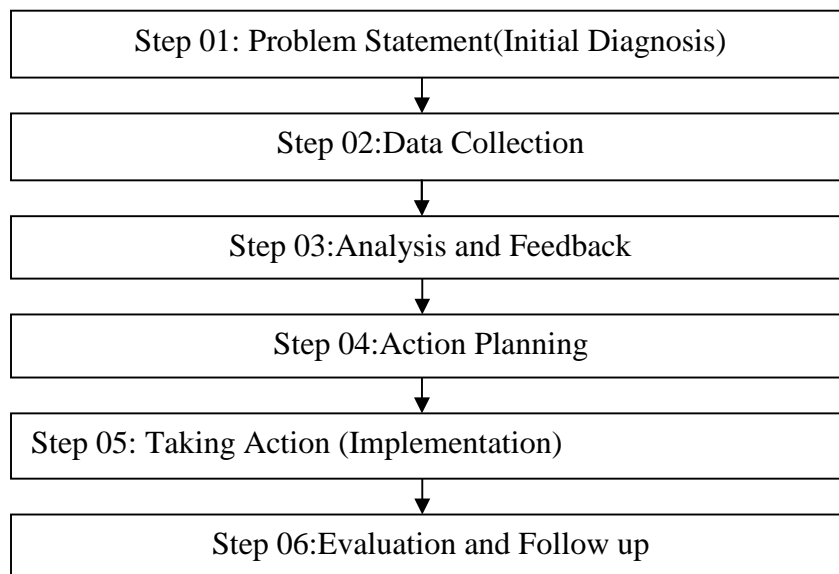
1. Definition of Action Research.

It is a method of inquiry for teachers and student teachers (Trainees). When adopting action research, the teacher or trainee aims at investigating classroom problems and trying to find them solutions. It is also called “field research” since the researcher needs to be presented in the field of study to carry out his investigation.

2. Principles of Action Research.

- A systematic process of investigation.
- It aims at finding solutions to different problems (educational problems).
- It involves both qualitative and quantitative approaches.
- It is applied in different disciplines (Education, Sociology, anthropology)

3. Steps of Action Research.



- **Stating the Problem:** In the classroom, different problems could face the teacher. The trainee will state the problem in his observation phase.
- **Data Collection:** trying to understand the problem, and read more about it. The Trainee can ask more professional persons to gain valuable knowledge about the problem.
- **Feedback and Analysis:** Providing feedback, personal judgement about the problem faced after studying it.

- **Plan for the Action:** put a plan, propose a solution to the problem and make a clear set of steps toward solving it
- **Applying the Action:** the researcher will implement the action.
- **Evaluation and follow up:** after the implementation, the trainee will evaluate the successfulness of his action.

Task: Apply action research steps in your teacher training courses and write diaries in which you will:

- Identify a classroom problem or issue. (E.g. Students misbehaviour, problems in understanding)
- Clarify the problem, giving your point of view, feedback and opinion about it.
- Suggest an action as a solution, making a plan to apply it.
- Evaluate your action.
- Evaluate your process of training in general.

Appendix 04: Focus Group Sessions Guide

University A-Mira, Bejaia

MII Pre-Experiment

Faculty of Arts and Languages

Experimental Group: MII Year, Didactics

Department of English

E-mail: Samia.Maafa@yahoo.fr

Experimenter: Samia MAAFA

Focus Group Guide

Focus Group	Time	Date	Place
Focus Group One	1hour	Sub-Focus Group 01: April, 5 th	Amphitheatre 25.
		Sub-Focus Group 02: April, 6 th	Aboudaw
Focus Group Two (Online)	Asynchronous “Two Days”	April, 19 th & 20 th , 2015	Facebook Group
Focus Group Three	1hour	Sub-Focus Group 01: Mai, 13 th	Amphitheatre 25.
		Sub-Focus Group 02: Mai, 14 th	Aboudaw
Material	Pen, Note-Book		
Objectives	FG SessionOne	<ul style="list-style-type: none"> - Evaluate the well progress of the Student Teachers training - Collect Qualitative data about Student teachers' opinions about their training 	
	Focus group Session Two	<ul style="list-style-type: none"> - Evaluate the well progress of the implementation of action research method in student teachers' teacher training 	
	Focus group Session Three	<ul style="list-style-type: none"> - Collect qualitative data about student teachers' opinions about action research 	
	Focus group Session One	<ul style="list-style-type: none"> - How was the starting of your teacher training process and how did you feel in the first teacher training session? - How did you find the classroom environment? 	

Questions Asked	Focus group Session Two	<ul style="list-style-type: none"> - What are the problems you found and the difficulties you faced in the classroom? - How you are dealing with these problems?
	Focus group Session Three	<ul style="list-style-type: none"> - How do you evaluate action research method? - What are the improvements you made by the adoption of this Method?

Appendix 05: Action Research Dairy Sheet

Full Name :	Age :
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[illegible][illegible]

Clarifying the Problem

Suggest an action as a solution and how applying it

Evaluate your Action

A Word Describing your Experience of Teacher Training

APPENDIX 06: the First Action Research Diary

What do you think about the process of teaching in general

Teaching is the communication of knowledge to learners. It is providing learners with interdisciplinary competences, in other words, it aims at facilitating learning by undertaking some tasks and activities to achieve learning effectively. We can also define it as a task performed by a teacher to develop certain competences in a learner by following a certain methodology to actively and effectively stimulate the learning process.

Problem : No classroom interaction

The problem I faced during my training is no interaction in the classroom. Indeed, students are unresponsive and do everything to avoid interaction. Obviously, there were times when no ~~one~~ students answer my questions even if they are clear and they know the answers, they are all the time silent. It was frustrating both for them and for me.

Clarifying the Problem

Interaction as defined in dictionaries is more an action followed by a reaction. According to what I have seen in my training, there is a little free interaction between the teacher and his students and between students themselves during the class. I think that the students don't speak because teachers don't work the communicative activities sufficiently. Another factor is that the students are shy to speak in front of their mates.

Suggest an action as a solution and how applying it

The Teacher is the key to develop learner's interaction. By asking questions because it is easier for students to answer questions than initiate a conversation. The Teacher should also choose the appropriate topics which fit the interest of the learners so as to catch their attention and keep them motivated. I wanted to apply all this but I haven't sufficient time to apply do it.

Evaluate your Action

I planned to do a variety of activities and tasks to try to improve students' interaction skill, But I faced many difficulties. Since it is the end of the year, many classes have finished the program and they prepare for exams, add to this the short period in which we have to end the training.

A Word Describing your Experience of Teacher Training

Even if it was just for a few weeks, this experience was enjoyable. It is not as we used to think when we were students, it is not easy to be a teacher, They face many difficulties either with time shortness or with the overcrowded classes, There are many limitations they encounter. However, if it is to do again, I will do it with pleasure.

APPENDIX 07: the Second Action Research Diary

In my opinion, teaching is providing to others and trying to clarify it in a better way. In addition, teaching is related to education in which the teacher is going to control, evaluate and adjust the behaviour of pupils or students. Moreover, he/she is always teaching the content of information and also giving morals; which means that the teacher is playing the role of parents (mother or father) in a second position.

As a trainee in a secondary school, I used to sit at the back of the classroom to make observations. Furthermore, I have noticed that pupils are making a terrible noise that makes or turns the process of teaching to be difficult. So, the teacher and the pupils are speaking at the same time.

Pupils talk most the time to one another and the teacher is always shouting and is obliged to get one or two students out of the classroom in order to calm down the situation. In my first experience, I came to the board to correct an exercise and the pupils were not interested and ~~was~~ began to speak (talk) about the way I dressed and the manner that I was writing the correction. Each time I order them to provide answers; they do it by speaking all together at the same time.

The solution was a group of strategies in order to get the pupils' attention back to the lesson, such as raising my hand, clapping my hands, ringing a bell and using three colored cards; green, yellow and red. First of all, when I raised my hand, everybody has stopped talking and looked at me as if I was going to do something. Clapping hands is generally used by almost every teacher which makes pupils awake. In addition, the bell is very attractive and humorous in which the pupils laugh so that they keep calm. Finally, the colored card were very useful and funny at the same time. When I raise the green card, pupils laugh and concentrate on the lesson but not for too long. The yellow card means that situation became serious. Indeed, they ask me to never show the red card because they know that ~~one~~ of them will get out of the classroom.



The strategies that I ~~used~~^{used} in teaching were beneficial in a manner that is humorous and funny, but each time you have to repeat the same process, and if necessary, use your voice and look at the eyes of the pupils to show them that the situation became serious and it is the moment to concentrate.

As a teacher trainee, I lived very ~~exciting~~ moments. The pupils in the secondary school are more interactive and funny than the pupils of the middle school. When I begin presenting my lesson, in the secondary school, the pupils understand my language and like to joke with me when they participate. Thus, all these actions make the environment amusing and both the teacher and the pupils do not feel bored. Indeed, the teacher must show respect to his pupils and understand their situation. At the first contact, each pupils has a story to tell and if you show him that you care about him/her, the pupils is going to respect you. In conclusion, ~~so~~ I use my mind, control my voice, keep eye contact with my pupils and control my voice as well as using body language to gain the control of the classroom.

APPENDIX 08: the Third Action Research Diary

What do you think about the process of teaching in general

I believe Tg is an essential profession and noble and require a lot of preparation, since educators have a great responsibility because the ability to teach should be judged on the basis of student Lg but not often, some student can learn in spite of a bad Tg. I think Tg is very interesting because it's very reflective, inventive also full of techniques to promote student's achievement; interesting but not easy because we have to combine many sciences and art to master and to be competent in the craft of Tg. So the process of Tg is very challenging and require many skills to make difference in young student's life, also require skills to make positive contribution to Tg, and I think require lot of passion in order to convey the message.

Problem :

After 3 sessions of observation in 2nd year classroom, I noticed that the majority of pupils are not concentrated during the class, and find the topic not interesting and sometimes do not understand the difficult words, so always the Tr had to simplify as possible as he can, on the other hand there's a lot of energy, I saw lot of interaction between them especially during group work and participation take place during text reading and listening, analyzing but never during the grammar lessons.

Clarifying the Problem

Personally this was also my case in secondary school, I neglected the rules of grammar and focus on group work and interaction in class and this affect the written expression, there's lot of grammatical mistakes. So all that is due to lack of concentration during grammar lesson, one of the reason is that because pupils don't know the importance of mastering some basic rules in order to understand what the Tr is saying and to perform well in other tasks, so this is important in order to see good results.

Suggest an action as a solution and how applying it

As it is stated before, pupils are interactive but lack of concentration and sometimes happen in mother tongue, so to reinforce their speaking skill and writing skill, I suggested to focus on grammar and this is what I have done by giving more exercises and explain more eg: explain which action happen before the other and simplify the rules of reported speech, active/passive voice and to capt their attention I suggested to the teacher to replace some texts by others more interesting, the purpose is that the pupils learn but feel at ease when they are working and become more motivated.

Evaluate your Action

After suggesting the idea and replacing 2 text in the text book and clarify more the grammar rules, it is true that the result will not appear in 1 week but I noticed that the classroom is quite, all pupils are caught by the lesson, all concentrating, this is a good step which mean pupils respond to this change which create more motivation, more interaction, also, I noticed that pupils tend to use correctly the grammar rules in speaking, in the formation of sentences is correct. The point is that there is not bad pupils but when you know their weaknesses, you can, change, add or omit and find a way that fit the hr so that their attention will not shift, and the result is always great.

A Word Describing your Experience of Teacher Training

Training is an efficient step toward teaching, it helps the trainee to be aware of the different steps he should follow, and how he will be able to face the ups and downs once in practice. I'm lucky to have lived this experience of, one day you were learning from someone else and then you practice you and transmit your knowledge to a newer generation, it's wonderful. I will never forget this experience and the time spent with an adorable pupils who I wish them all the best, also the precious pieces of advice of my supervisor who really helped me so much.

APPENDIX 09: the Fourth Action Research Diary

What do you think about the process of teaching in general

The teaching process is not very bad not very good. It is situated in the middle position. But it should be ameliorated by ministry of Education, starting from elementary schools to high secondary school. The most important in Education Sector are the books (school books produced by experts-teachers with the Ministry of Education. After that, we move to the teaching process. The books should be original and related to the field of each stream (economy, letters and language, philosophy, science and technology). Because the interesting for pupils is the domain they study, so they focus only on the important modules. These pupils should receive a good teaching to get a good learning. Some teachers do not prepare their lessons and do their job not in a good manner. If the lessons are not interesting to learners, they do not work well and hard to learn in the classroom. There are many things in the educational system that should be improved/changed.

Problem: Pupils don't do their Homeworks

I encountered this problem almost with all classes. The majority are Third year classes and others 2nd year letters stream. There are 2 or 3 pupils in each class do their works, exercises, homeworks. In general, they don't do their exercises, neither in class nor at home. They come to class without bringing their books. They almost don't participate to help the teacher. They feel not interested of the English language.

Clarifying the Problem

The general causes that put learners out of learning English, due to their lack of motivation, their weakness of participation, their interests in learning in general. They put the English language module in side because they seen it as a complicated language. They also think to do not use it in their future studies. This is what make them as a language to be ignored.

Suggest an action as a solution and how applying it

As a solution, I have gave them exercises that are related to their domains (philosophy, economy, languages). They are an additional tasks to make them more active, more competent and more interactive. I have gave a dialogue, texts to fill in the gaps, essays and written production that are always related to their field. They practise partly conversations about their future job. These kinds of exercises make them more dynamic and more productive.

Evaluate your Action

During my training period, I worked with learners that have many difficulties and problems in the English language. With all techniques and exercises I gave them, I had no change in their level. They always get a limit in their English learning. There were no improvement, no mistakes missed, they had difficulties in all skills. They did not respect the grammatical rule, tense, etc. They had many things to ameliorate.

A Word Describing your Experience of Teacher Training

After passing my training period as a trainee, I learned many of teacher's tasks in classroom. I noticed that the teacher should respect the teaching process, prepare his/her lessons before application. I remarked that we should well transmit the messages to the pupils. The pupils should get/understand the general ideas of the lesson. Teaching is easy, but difficult at the same time. The home works are so important to them; the teacher should improve their level in all skills. The vocabulary and grammatical rules are important too because they should know the basic rules before going to college/university.

APPENDIX 10: the Fifth Action Research Diary

What do you think about the process of teaching in general

It is a noble job. But unfortunately I'm not really interested on it, because it needs patience with pupils, doing efforts in finding their weaknesses and their lacks and of course create and suggest new solutions in order to solve their problems and troubles. But I'm afraid that I will not succeed in realizing all these results. So I prefer leave it for the one who could do it.

Problem :

The main importanta problemes are: The absence of participation and the lack of interaction.

Clarifying the Problem

I had attended many courses with second year students at the university. This period was enough for me to discover some problems with students. The most important one is the absence of participation and the lack of interaction neither between students & teachers nor students & students. The reason for that is the lack of materials (new technologies). This is why teachers use always the traditional methods of teaching in which students in general do not receive the messages appropriately and don't understand the content of the lesson.

Suggest an action as a solution and how applying it

As a trainer, I had suggest some solutions that I thought that they could be beneficial. These solutions were: The use of new technologies during the course such as: data show, movies and even video, because they were studying civilization which was very complicated. So students were not capable to understand the stories and the events.

Evaluate your Action

After introducing these materials in class, the results were good, there was a great changes inside the classroom a lot of interaction, students understand stories easily. They also correlates each event with the other. They were capable to answer the questions and even communicate with me and with the trainer, because they had sufficient ideas and information. So the solutions I had suggest were successful.

A Word Describing your Experience of Teacher Training

In the beginning it was only observation, so I didn't feel the real responsibility about this job. But after starting the demonstration and the presentation phases, I recognize what is the great value about this job. It was fantastic, beneficial because I had learned new things, the experience how to train students and how to be a good teacher.

At the end, what I could say is that we can succeed in this job if we love it really and of course do it from the bond of our hearts and by willingness.

APPENDIX 11: the Sixth Action Research Diary

What do you think about the process of teaching in general

The process of teaching is hard because it is difficult to cover the needs of every student. Whether they are dyslexic or don't speak. The teacher must manage his classroom and we know that managing the classroom is not easy. Teachers have to prepare the lessons before presenting them and they spend a lot of time for this.

Problem :

as a teacher I find a problem in controlling the classroom. for me there is probably no issue more pressing for me as teacher than dealing with classroom control.

Clarifying the Problem

when I am on the classroom I find difficulties in controlling the students. They are so talkative and don't listen to me. when I order them to stop talking they don't care and this influence negatively on me. I feel like I am incapable to control them.

Suggest an action as a solution and how applying it

after a lot of reflection I find solution which is warning each time the students talk I inform them that if they continue this misbehaviour will be followed by specific disciplinary consequences. for example the student is warned that continued misbehavior will result the teacher's calling the parents.

Evaluate your Action

I have applied this solution many times and it is a successful solution. The students do not talk a lot, they listen to me and respect me and I feel good about it.

A Word Describing your Experience of Teacher Training

in the period of training I have experienced and I learned a lot of things. teaching is not an easy task as many people think it is a simple job. Because as a teacher you are expected to teach children from all backgrounds, those who enjoy school and those who hate it. those with supportive parents and those not. as teacher you must take in consideration a lot of things to ensure the effectiveness of the lesson.

APPENDIX 12: the Seventh Action Research Diary

What do you think about the process of teaching in general

I can consider my training as a good experience for me since I have discovered what the teaching means exactly. Teaching is an art and it is among the most jobs, through it the knowledge passes from one generation to another. Teaching is a sacred job that requires many efforts because it is not only getting and receiving the information and the knowledge, and a good teacher is not only the one who masters the language but he is ~~also~~ the one who masters. Creates a good conditions in which learners learn for themselves and be motivated. Teaching is an art that requires a capable teacher.

Problem :

During my training, I have deduced many problems faced the teacher in his classroom, and among them I have mentioned the problem of students' behaviour, so there is a lack of discipline, they speak every thing in the classroom without any respect to the teacher.

Clarifying the Problem

Through my training, I have discovered many problems faced the teacher during the classroom explanation. It's my opinion, I think that the teacher is only the unique person who can solve all these problems since he is the first responsible of teaching process. The teacher should first understand the problem through reading about it to know^{more} about it, then he tries to find solutions to these problems by changing his method of explaining and training to be serious but fun at the same time.

Suggest an action as a solution and how applying it

There are many different problems faced me as a teacher in the classroom, and these problems should be solved, so I suggest an action that help me a solution to avoid this kind of problems. I decide to change completely the method with my students through discovering each student's personality in order to know how I deal with him.

Evaluate your Action

After my changing of method, I have discover that my student's behaviour also changes. so, I can evaluate my action as a successful solution to my problem because the new method assists me to get a quite students with an excellent comportments.

A Word Describing your Experience of Teacher Training

The training gave me an overall or general idea about teaching process, through it I get an experience about all the problems faced the teacher during the classroom explanation. After my training, I have discovered that teaching is not a simple process that requires just a teacher who has much knowledge or masters the language in a good way. Whereas, teaching is among the most difficult jobs and it requires a good teacher who has the ability to understand each student's personality in order to know which is the best method to be applied in his classroom.

APPENDIX 13: the Eighth Action Research Diary

What do you think about the process of teaching in general

To say that teaching is enjoyable is not sufficient to describe it. That is to say teaching is the effective transmission of knowledge. It is creating favorable condition for learning to take place. And more than this. It is educating. And to be a good teacher requires the capacity to move smoothly from all roles (Instructor, trainer, facilitator, actor)...

Problem :

During my training period I thought that every thing was easy and teaching is not a hard task but I discovered that when I had performed my lessons I didn't finish them in the time allocated, because when we start speaking we just concentrate on how many knowledge and information we can utter and transmit.

Clarifying the Problem

Once the problem is perceived I had questioned my tutor about it, he said that each lesson should not be finished in one hour but most of them should be. He advised me to try to devote my time when preparing any lesson.

Suggest an action as a solution and how applying it

After clarifying the problem with my tutor I suggested to put into application a time managing that was about providing 15 to 20 minutes to the warm up 20 to 30 The presentation of the lesson 10 minutes to the activities and at the last 10 minutes for clarifying things that are not understood.

Evaluate your Action

Following all what my tutor advised me was a success to me because I have found that what was missing

A Word Describing your Experience of Teacher Training

I really appreciated My training in Nelson High School, I personally noticed that training proves to be primordial for seekers of solid basis necessary in their future professional career. Now I feel that I'm ready to take the responsibility of being a teacher. All these moments of emotions, feelings and Nostalgia let us consider that we are really living. Is Not that a great pleasure?!!!

APPENDIX 14: the Ninth Action Research Diary

What do you think about the process of teaching in general

for me and and depending in my experience as a trainee for few days at high school and as a student at the university, teaching is a process which has an important value because of our needs to it and it reflects our society deeply. Teaching concerns with the instructions and different information the teacher gives for his students in order to clarify for them these instructions so that they understand and easily use it in the future without difficulties.

Problem :

At the beginning of my training I had found much problems and difficulties not with the teacher but with the learners, first, they could not understand my instructions and the words I used, and my voice I can't use it enough so all the learners hear it, second, time management which is very important during the lecture, finally, the organization of the sequences.

Clarifying the Problem

After discussing all these difficulties with the teacher and then I decided to follow a technique which can help the learners, first, I tried this time to use a language and words which are easy and clear (Krashen $I+1$) and it was so effective. Second, I tried to guess the time needed for the lesson, the activity and really it was also so effective. Then with the help of the teacher and his instructions I can now organize these sequences, and my voice all the classroom can hear it.

Suggest an action as a solution and how applying it

The learners can't understand the pronunciation of some words, because they learn the words without respecting the phonetic rules, so it's difficult for them to understand those words even they know them (they write them correctly but with wrong pronunciation). So as a solution, as suggested for them to learn and master some rules concerning the silent letter and the final /t/ /d/ /ed/ /s/ /z/ and to check the new words using dictionary in order to learn them correctly.

Evaluate your Action

Using this action with the learners, helps them much to recognize much words and pronounce them correctly and they correct some mistakes when using such words, so this technique is so helpful for them. And thanks to this action the learners know that the purpose of learning a language is not just to know much words and expressions and not just to know how to spell it but also how to pronounce them. And they promised to pay attention to the pronunciation of words.

A Word Describing your Experience of Teacher Training

At the beginning I didn't felt well, but now I really like it, because I discovered much things about I enjoyed my time with the learners.

It was an amazing experience in which I learnt much things and expressed my capacities as a teacher, now I'm ready to be a teacher and a good teacher who really loves her career.

by the end, I discovered that I want to be in the domain of teaching.

APPENDIX 15: the Tenth Action Research Diary

What do you think about the process of teaching in general

I think that the process of teaching is the basic of every sciences without teaching we cant do anything and we never develop our knowledge.

I think that the process of teaching is very important for everyone, thanks to teaching we can get the others fields of job such as : medicine, ingenering, ... etc. In teaching the teacher has just to choose the best method that can give him a fruitful results by the end when the students understand everything and they have improved their knowledge.

Problem : participation.

In the class room I use the simple words, short sentences, gestures and the topics are very interesting, the questions are very easy but unfortunately there is no participation, there is no reaction.

why?

perhaps they have a problem in understanding, or my method of teaching it's bad.

Clarifying the Problem

There is just two points in my mind about the reasons of this problem : the problem is with learner or with my method of teaching. I feel the learners shy and low confident, because sometimes they know the answer of my questions but they afraid to speak.

I think because they don't know how to express themselves or they need a reward but in other hand I think my method of teaching it's not good or they dislike the subject.

Suggest an action as a solution and how applying it

I gave them a questionnaire and they answer without writing their names, and I asked them some questions about my method of teaching in order to know my positive and negative according to the pupils and know their opinion, their needs and they proposed a new method to follow. of course when I present my lesson I praise the pupils when they do well, this is a real best I was polite and patient as possible with the pupils who caused problems, never laugh or permit others to laugh at pupils mistakes and be good at discipline.

Evaluate your Action

In general my actions are successful, I did my best in order to create a good and kindly atmosphere, after this actions all the learners participate without exceptions.

A Word Describing your Experience of Teacher Training

My training period is a great chance for me and my favorite experience that can be a plan for my future career.

I really enjoyed it much, it was an existing experience, I have learnt many important things in the domain of teaching and learning. I have made new friends, new ideas, I gathered data about how to be a good and successful teacher.

By the end of my training service I conclude that the teaching process is a hard task with a big responsibility because the teacher pay attention for all the students and listening for their problems and try to help them, because when we teach we not only concentrate to the rules of grammar but also their personality. but in reality teaching is very good, nice, and sacred work because you can educate the pupils in the best and true idea and one good and solid base, also because the teacher is an important factor in his particular way, identities, perspectives and personalities of the students.

APPENDIX 16: the Eleventh Action Research Diary

What do you think about the process of teaching in general

teaching is an act of transmitting knowledge from teachers to pupils, from the beginning we say that's difficult work because of the variety pupils personalities and teachers are not facing the educational problems but also the personal ones. even though it's very hard, but still a nobel job. teachers are not only teaching academic knowledge but they are educating future generations, through teachers experiences and advice they gain from them.

Problem :

The teaching problems are so many; problems in the behaviour of the pupils, problems of transmitting knowledge, problems in the programme but the most important one that I faced in my training that they are demotivated and don't care about their studies.

Clarifying the Problem

The pupils don't care about their studies because of the impact that the age of pupils and their period of adolescence is disturbing their studies. They are not really aware about it, they forgot that their future depends on this period, we can summarise these points ~~that~~ by saying that they are dominated by their emotions and adolescence.

Suggest an action as a solution and how applying it

After studying the problems the most successful solution that we can suggest is to use a different and new methods for transmitting knowledge, for example, to teach a grammar course the teacher should choose a topic that may attract pupils and let pupil debate such topic and include the grammar rule in this topic and this will let them remember the rules because the topic was very interesting for them.

Evaluate your Action

During my training as an unexperienced teacher it is difficult to ~~to~~ to change something and try something new but, I try to introduce a topic that they want to speak about as a warm-up, I noticed that they react by being attentive and such topic ^{is} motivating them and always help by different point of views and that what make the lesson successful.

A Word Describing your Experience of Teacher Training

As a training teacher, my experience was a practical preparation to the domain of teaching, it gave me an idea about the problems that teachers face with pupils behaviour, I find it very difficult to be a teacher I think that we need time to acquire methods of teaching and we have to learn more from experienced teacher, even if it was difficult but still unforgettable moments, we spend joyful days with students.

APPENDIX 17: the Twelfth Action Research Diary

What do you think about the process of teaching in general

Teaching is a very interesting process and is the imparting of knowledge between teacher and learners.

So in the teaching process the teacher should be very attentive in the way of his/her teaching method because, to succeed the teaching process the teacher have to follow some methods and strategies in the classroom.

Problem: Lack of interaction.

During my training, I observed that the pupils don't concentrate on the course and I felt that there is a misunderstanding, especially when I asked questions.

So I can say that there is a lack of interaction in the classroom which means that the pupils don't participate or don't try to answer or correct the exercises.

Clarifying the Problem

The problem is that there is a lack of interaction between the teacher and pupils, this is due mainly to lack of concentration and the misunderstanding of the language.

Suggest an action as a solution and how applying it

For lack of interaction I thought that the best solution is to change the way of asking my questions. So I asked direct and simple questions and I tried to stimulate their responses by doing quizzes and I promised them that if they answer correctly they will have additional points. This was what made them motivated.

Evaluate your Action

After I made this changes I realized that my pupils understand better and participated more than before, so the changes were very successful.

A Word Describing your Experience of Teacher Training

During my training I felt that teaching is very interesting and precious job. I have experienced many methods and techniques of teaching that I haven't experienced before. All this was due to my supervisor who consolidated me and who advised me during all the period of my training.

APPENDIX 18: the Thirteenth Action Research Diary

What do you think about the process of teaching in general

The process of Tg in general is the process of transmitting knowledge to others. It is guiding lrs to achieve knowledge. It is helping pupils to acquire their needs. Teaching should be conducted in an organised and well planned environment and setting. It is a hard work which demand a lot of patience, tolerance, effort and wisdom. It makes the Tr play different roles: facilitator - coach - collaborator - transmitter of knowledge - instructor - consultant and also acts as a parent.

Problem :

The field of Tg unfortunately is full of problems. Learners misbehave, no respect to their teachers, no motivation, no interest, don't bring the materials (books, copy books), even when there is a copy book they don't write. Their way of writing is horrible, no organization. Trs too play their roles in such problems. There are teachers who are not motivated enough, doesn't make effort to control his/her class and get the attention of lrs. Are not autoritar where they should be. They let lrs free while they are talking. Don't try to involve them.

Clarifying the Problem

Trs should set clear requirements for students in terms of their behaviour, and never tolerate disrespect. The administration too should play its role in maintaining good behaviour and make lrs understand what education really is. The absence of parents too has led to that catastrophe so they should come back to the surface and do what they are supposed to do as parents, having control of their children, knowing their acts, interest and way of lg. Trs, administration, parents should be very unified and work in collaboration in order to enhance both Tg & lg.

Suggest an action as a solution and how applying it

The action to apply is : authority where authority should be used. Never tolerate misbehaving (enough ^{to much} discussion between them because it disturb). Having fun time to time in order to relax the atmosphere. Don't turn too much in simple and clear things, so that pupils don't get tired or bored. Being simple and precise. Relating things to their personality and daily life. Giving responsibility to pupils so that they feel interested and push them to work. Always rewarding them by saying "thanks" "good job" "very nice" ..

Evaluate your Action

In some classes my action was succesful. I succeeded in getting the attention of pupils and motivate them through interaction (Tr > Ir) ; (Ir - Tr). I achieved my objective which is working through cooperation. But in other classes it wasn't successful because of lack of motivation and also the timing (the evening ..)

A Word Describing your Experience of Teacher Training

In my experience as a Tr training, I realized that what is set as theory is totally different from practice. It gave me an opportunity to test my own abilities. I have to admit that teaching is not a simple task as it may seem, but it is a very difficult one. It is a big responsibility towards ourselves and society. I learned how to be responsible toward the profession since I'm expected to guide the learners and help them to reach their goals. I learned also that the good teacher is the one who creates a healthy environment for learning to take place and help all the learners to express themselves. All the qualities that a teacher should have can be acquired by perseverance and sense of responsibility.

APPENDIX 19: the Fourteenth Action Research Diary

What do you think about the process of teaching in general

Teaching is the process of enabling learners to learn, or simply, it's guiding and facilitating learning. Teaching should be based on some principles to make the process of learning successful that are: preparation, presentation, practice, and evaluation.

Teaching is a honorable job, you give new information to pupils, you educate them, you try to change the bad behaviors in them. Any way, it's a little bit difficult to get to the front of the class, but this challenge pushes you to bring new things each time for transmitting the message very well.

Problem :

As a teacher trainee, I tried my best to transmit the information to the pupils. But while doing this, I noticed that the learners have a problem which is exactly in mastering the grammar of the language, and what makes me notice this problem is the answers they give on my questions especially in activities: they mix between the tenses, they misuse the reported speech, mistakes in conjugation... all these make their language bad full of mistakes.

Clarifying the Problem

To clarify the problem more, I remember I presented a lesson about reported speech, then it's followed by activities and lessons of the sequence in which reported speech is included.

I explained well the changes in statements, questions, pronouns... but when we moved to practice, many mistakes appeared - pupils don't differentiate between tenses as present simple and present perfect, or present perfect and past perfect... also they don't make difference between singular and plural, they forget the "s" of the third person in singular, they don't conjugate well the verbs.

Suggest an action as a solution and how applying it

To solve this problem, I have chosen grammar translation method as a solution. First I give learners grammatical rules and I ask them to ask take these rules by heart. Then we apply these rules by doing grammar drills and translating sentences from their native language (sometimes we use French) to target language (English).

Evaluate your Action

By applying grammar translation method, I noticed that that learners remember the grammatical rules and they don't make any mistakes between them. Concerning the practice, I noticed that learners had improved themselves in grammar; they make differences between tenses, they pay attention to the verbs' endings, but sometimes they use words in French instead of English because they master it better than English, but I always correct them.

A Word Describing your Experience of Teacher Training

I have really appreciated the practical side of teaching in comparison to what I've learnt in theory in TEFL. This training period made me feel that what we've seen and learnt in theory about the methods, techniques and objectives were necessary and helpful, but not enough. In my training, I've learnt a lot of things. A teacher should work hard to make his learners understand; the teacher also should be courageous, intelligent and patient and motivated to do the job. My training was a positive experience in which I've corrected some concepts about teaching.

APPENDIX 20: the Fifteenth Action Research Diary

What do you think about the process of teaching in general

Teaching is a noble job and the difficult one, because it has a great responsibilities to be taken into consideration, it is the way of creating a cultural elite in the society and awareness.

During my training period, I have noticed that not every one can do this job, because the teacher have to be able to support and challenge all the difficulties; as soon as, teaching is not only the transformation of knowledge and it has an important side such as educating morals, guiding learners to the right way.

Problem :

During my training of teaching, I have noticed that this new generation suffer from the lack behaviours, respect and shyness. for me I think that pupils from different school don't take their learning into account, they are physically in the class but mentally they are out, so I rarely find two or three persons have a motivation to learn and the others they don't have a purpose.

Clarifying the Problem

During my training, I have noticed that pupils have a problem in their behaviour such as politeness and respect; especially and unfortunately their relation with the teacher, they see him as their colleagues, they don't give the teacher the highest degree which is needed, they don't use a polite speech when they speak. This problem of morals become a dangerous phenomenon in every school, we must wake up to face it by finding some solutions.

Suggest an action as a solution and how applying it

Seriousness and shouting. I think that were the best way I have chosen during my training for keeping the pupils' attention and concentration, because it is a difficult situation when the classroom is charged of noisy and disrespectful, so for me I used these important method for managing the pupils in the classroom.

Evaluate your Action

The two methods that I did during were helped me in managing in the pupils in the classroom and were succeeded in attracting the pupils' attention and importance, fortunately they became very respectful and tried to follow me every session, they liked my method of teaching, but these methods were succeeded only for some pupils because it is difficult to manage all the classroom if. As there are other pupils look for their teachers as an enemy.

A Word Describing your Experience of Teacher Training

Training is the best method for me as future teacher as it helped me to know the world of tg and teachers, it gave me the chance to prepare myself for my future job. At the beginning, I was stay at the back of the class and I observe the teacher method and pupil's behavior, after the teacher provides me with some lectures that I would present and I followed his plan lesson.

I have discovered many new things about teaching, and it helped me to face the difficulties in the classroom such as: stress, shyness and anxiety.

APPENDIX 21: the Sixteenth Action Research Diary

What do you think about the process of teaching in general

I think that teaching is a noble job and personally I like it because it permits showing adequate ways in seeking knowledge and transmitting them from one generation to another, ~~but~~ I find teaching difficult because it requires a lot of qualification and requirement. and since I like teaching I should work hard to fulfill my dream.

Problem: Lack of concentration and attention.

During my training period I observed that student don't concentrate with me they are always talking to each other, they don't pay attention at all. and whenever I order them to keep silent they don't listen to me, they ignore me, the classroom is always noisy, no participation and interaction.

Clarifying the Problem

From what I have studied lack of concentration and attention could be defined as the inability to give your attention to something. and the reason behind this may be fatigue or environment, I mean the atmosphere. That's why pupils can't concentrate and pay attention. They are not able to memorize information. I think that lack of concentration and attention is a serious problem which needs to be solved.

Suggest an action as a solution and how applying it

For lack of concentration and attention I think that the best solution is to create a good atmosphere & setting the good condition for learning. So I decided to apply the following things, I warned people by mine point. If I saw someone talking, I called every one by his/her name & this increased their motivation, I divided the blackboard into part & I have used colors to attract learners attention. I tried to be friendly & kind with them. I gave them the chance to speak & gives us their opinion. and I respect their responses.

Evaluate your Action

After I did the above solution, I observed many changes in my pupils, they are calm, the classroom is not noisy, they concentrate with me and they pay attention to all things. They ask question, they want to know every detail concerning lesson, they did their homework, they gave me their answers and opinion without hesitation. Now I can say that I have achieved my goal, it was successful (I mean the action).

A Word Describing your Experience of Teacher Training

During my training period, I have noticed that to be a teacher is not an easy task or matter. Since it requires a good teacher who play different roles at the same time, and in order to control his/her class and to convey his/her message. He/she has to keep an eye about every detail in the classroom. I really enjoyed my time and liked the role of being a teacher. I am so lucky to have such a chance in my life. it is amazing.

APPENDIX 22: the Seventeenth Action Research Diary

What do you think about the process of teaching in general

Teaching is a good process in which learners learn or pick up information from the teacher and its benefits are positive, in teaching learners must listen to their teachers in order to understand what the teacher means and wants to explain for them, we have also the idea of the respect, each learner has to respect his teacher in addition to ~~the~~ keep silent in the classroom.

Problem :

The problem that I faced during my training is that pupils speak too much in the class and I found this act very bad, it disturbs the teacher and makes him angry, no focus on what he wants to explain or what he had prepared to demonstrate.

Clarifying the Problem

According to my ~~past~~ previous knowledge, from what I have studied, respect is a very good thing that everyone should have in him or her so, I think that pupils have to respect their teachers. The parents are the responsible behind the behaviour of their children so it is up to them to make some advice to their children.

Suggest an action as a solution and how applying it

I think that the solution is to punish pupils for their behaviour, for example to reduce their points in exams or in a quiz but I think that it's better to advise them to be quiet and doing well in classroom to give them points, so pupils have to learn but in some conditions that the teacher have to create to let them have a good learning.

Evaluate your Action

Some teachers think that punishment is not the best solution to the pupils but me I don't think so, because pupils are scared when it deals with the points so they do better to avoid problems that can let them lose their year, some pupils too are scared from their parents that why they don't make noise or problems in class.

A Word Describing your Experience of Teacher Training

During my training I discovered a lot of things about what kind of situation the teachers could be. For example, how to behave as teacher or how to speak with pupils, a teacher should be hard in order to be free to explain a lesson, to punish pupils in case of disturbance, to take some instruction to get a class in order.

APPENDIX 23: the Eighteenth Action Research Diary

What do you think about the process of teaching in general

Teaching is a noble job, it has a great value upon society since teaching doesn't mean only to transmit knowledge, it is always to educate and set the best behaviour in order to create thoughtful citizens.

According to me a teacher is not only a source of knowledge, but also an actor, the second father/mother and most importantly is to be a psychologist who can guess the best medicine to cure classrooms' problems.

Problem :

During my training, I recognized that what I have learned in Didactics module and what happens in the classroom are too different and I noticed that there are plenty of problems that could impede the teacher's work, one of these problems is the one of Lack of motivation which is normally the engine of learning and teaching, so without motivation, it is not possible to achieve the planned goals.

Clarifying the Problem

During my training, I observed that the most popular problem which was shared among all classes was motivation, I arrived to this conclusion through the observation of students' behaviour which reflect their demotivation, most of students were absent-minded, others were too talkative and some students didn't even come and they were always absent and still others consider english module very boring and this happened mainly due to the lack of understanding.

Suggest an action as a solution and how applying it

It was so difficult to deal with this problem and at least to minimize its negative effects and as a teacher, it was of my duty to look for a solution to cure this problem.

In order to attract the students' attention I found that it was important to create the best atmosphere inside the class, thus I adopted many techniques such as varying the way of presenting lessons, facilitating the content of lessons as much as possible and tried to be flexible in order to meet students' needs.

Evaluate your Action

After the implementation of these techniques, I noticed that students became active, curious, they ask questions, they try to give answers, also the average of absence decreased, thanks to the application of these techniques most of students got good marks, and the most important change that took place after the use of the different techniques is that most of students ~~are~~ became more attentive, so it was easy to ~~be~~ satisfy both my needs and students' needs.

A Word Describing your Experience of Teacher Training

Being a teacher has always been my dream and this training was a great opportunity to discover the real sense of being a teacher, I experienced the feeling of stress, anxiety during the presentation of lessons, I saw new faces and I met my teachers of secondary school and the most important thing is that I learned new things about teaching such as how to treat learners, how to satisfy them, how to evaluate them and, training taught me responsibility, self-control and decision making.

APPENDIX 24: the Nineteenth Action Research Diary

What do you think about the process of teaching in general

I think that teaching in general is the ability to guide the learner to become skilled, to provide him all the valuable conditions to learn, in order to make him aware, focused, and motivated. In addition, to create in him self-study and esteem the responsibility, and the knack to monitor his learning. According to me, teaching is the process of socializing students into new behavioural norms, and professional ways of working, it requires a substantial commitment to the content, or subject matter. It seeks to change society in substantive ways.

Problem: Classroom Interaction and critical thinking.

During my training period, I've noticed that our students miss something which is very important. They don't interact with their teachers in the classroom, when performing a lecture, even this, they aren't pushed to think critically, in the way that they don't use their minds to think in a critical manner, they just limit themselves to what the teacher is saying and apply it, without trying to criticize or making at least one interpretation of the situation studied, this means that: even the interaction in the classroom is hampered and couldn't be improved, because, the critics leads to making the students collaborated and boost them to interact with each other.

Clarifying the Problem

what I know about critical thinking is that: is the ability to think logically, it's based on sound evidence, it requires a close attention to facts, evidence knowledge and how it's used in situation, where facts are in conflicts or the evidence permits more than one interpretation. It's involving, the ability to gather and analyse data, and solve problems. the students can accurately explain a point of view that he/she agree with. Besides, Interaction is putting students in a real situation and make them interact with each other, to create discussions, and motivate them as well. This creates in them self-study, self-directed, responsibility, and self-guidance towards their learning process, and makes them effective in their society.

Suggest an action as a solution and how applying it

To solve that problem, I can suggest a solution which is: amalgamate students into small groups to reinforce interaction and collaboration. By illustrating them a theme or topic that's relevant to their own experience, to foster and create in them the love of criticizing and analysing things; this is through personalising the theme to motivate them, and make it more concrete and real; when this skill is achieved, the interaction is improved as well.

Evaluate your Action

Because of time constraints, I couldn't apply this technique or solution in the classroom.

A Word Describing your Experience of Teacher Training

What can I say about my training or teacher training is that: I've experienced a good experience during this short period of time, I was really excited of being one of the trained student at our university; I tried to do my best to be effective and attentive. In addition, Teaching is an amazing work, it pushes you to challenge yourself: first, to improve your own capacities to do your best, to convince the students, and then, the environment where you work, act, move as well. Besides what I can add is that: "when we teach, we learn at the same time".

APPENDIX 25: the Twentieth Action Research Diary

What do you think about the process of teaching in general

I don't like to simply because it's a hard, difficult process. It's not easy to be a good teacher but you have to be. To teach is a great responsibility; you are in a position of building the basis of many pupils. Just ask yourself "are you ready to take this challenge?" When I ask myself this question, I always feel as I'm not ready. However, I'm a student of didactics which means that I will become a future tr with Allah's goodness and help. With little and serious work, I think I will be able to improve my capabilities. That's what I'm trying to do. → Ready for the challenge
yes we can :)

Problem :

When I started my tr training I have noticed one thing "Not really easy to be a tr". I observed many problems in the CR. Many of these problems are related to the pupils. Lack of attention can summarize such CR environment. The pupils are not attentive; they are talkative and do not listen to the tr when he is explaining the lesson. I felt that they are not interested at all. How to attract their attention? I was asking myself this question all the time.

Clarifying the Problem

Attention is one of the major factors and causes that lead to better lg. The student can never learn without attention. Attention can be two types: Automatic or Selective. Understanding the problems affecting attention is crucial to face the problem. So, creating a favorable and suitable CR environment is important to keep pupils focused on the lesson.

Suggest an action as a solution and how applying it

To deal with the problem of attention in my CK, in my initiation face, I understood well the problem. I thought about a solution and I planned for an action to be applied. I planned for a lesson in which I used examples attractive. Instead of using examples about unknown and old personalities (for the pupils) I used examples about known footballers as Messi and Xavi and about singers as Justin Bieber and Celina Gomez. Wow, the pupils were greatly interested.

Evaluate your Action

I think that my action brought good results. The pupils become more attentive. They started to be more interested. I cannot say that the process or the solution succeeded 100% but I think with much time the results will be better.

A Word Describing your Experience of Teacher Training

Starting my training trying to solve the problem has really helped me. I think that this notion of research in the CK can be helpful for the trainees to better prepare themselves for it. In my training, I learned many things. I got a clear idea about what is it and how to improve your teaching skills. Unfortunately, we didn't have much time to practice more otherwise, everything was enjoyable and good.

APPENDIX 26: the Twenty First Action Research Diary

What do you think about the process of teaching in general

- teaching is ~~an~~ enabling students to learn,
setting good conditions and good atmosphere
for best result.

Problem :

- As I was in observation phase, I noticed that the teacher was not really respected!
- Very talkative! without participation.
- there is no platform.
- didn't congratulate their students, that is to

Clarifying the Problem

- So as I remarked that pupils didn't respect their teacher, very talkative, ~~(in demonstration phase the first is to have)~~ all these problems exist a lot in contrast to past days (time).

Suggest an action as a solution and how applying it

- ① - first of all teacher have to be responsible!
- ② - the teacher have to be strict and comprehensive, kind at the same time to keep respect between
- ③ them (different roles, is to move from one role to another).
- ④ - the capacity to control ^{all} the classroom.
- 5 - finally bring out platform in which I could control all the classroom (those who stayed at the back feel that they are ignored, so they make noise).

Evaluate your Action

- As I used to smile with them on the other side very strict in doing the course, I found them very interested. I mean here to be cool!
- On the other side as we bring the platform I was able to control all the pupils & stayed at the back of the classroom.

A Word Describing your Experience of Teacher Training

- for me it was a great with a great pleasure to do training, especially when I did the first step which is demonstration, here I felt that I realized my goal because it is my dream to be a teacher although all my constraints (barriers) that I counted.

APPENDIX 27: the Twenty Second Action Research Diary

What do you think about the process of teaching in general

For me, it's an easy task if you know how to do it!

I think it is a process that needs time to master its steps. So it demands a lot of effort and energy and time.

Therefore this job is destined for the persons who know how to be patient.

Problem :

I noticed that there are only few students who care about the English language and I think that they find it difficult to understand and to learn.

And I found too that the program was really boring so that it doesn't fit with the learners' interests.

My trainer and other teachers don't make efforts to attract the learners but they let them do what they want in the classroom.

Suggest an action as a solution and how applying it

I think that in order to stimulate the learners, it is preferable for the teacher to use more material than the school book and Copybooks.

And I think that the teacher has to care about every single student in his class and not only about those who participate or have correct English.

Every person with his circumstances, so the teacher should not neglect any one of his students or ignore him just because he doesn't dispose of the good English language skills.

Evaluate your Action

I noticed during the presentation phase of my training that when I used pictures (other pictures than those found in the school book) ~~the students~~ more students participated than usual.

And they all interacted with me, even those who don't care about English, and later on they told me that they hated their teacher ~~before~~ who is my trainer, because he ignored them!! ~~who~~ and when they found a teacher who cared about them as persons they started to get interested in English.

A Word Describing your Experience of Teacher Training

It was very beneficial for me. I learned many things from this experience. the major things ~~that~~ are as follows:

- * a good preparation leads to a good presentation!
- * Love what you do so that it loves you!
- * Show care about the persons you deal with, they will love you!
- * Don't underestimate any one, so that you don't regret it!

APPENDIX 28: the Twenty Third Action Research Diary

What do you think about the process of teaching in general

I think that the process of teaching is that process by which one person helps others to get knowledge and skills. At least two people are always involved in it, teacher and learner both are contributing in the teaching process. Teaching is a heart work and a noble job.

Problem :

during my training period, I observed students misbehaviour in the classroom. This is the most difficult problem that teacher faced, because when there is misbehaviour in class, it leads to less understanding and less interest to the lesson.

Clarifying the Problem

I think in my point of view that students misbehaviour is one of the most troubling phenomena in classroom. It interrupts the teaching and learning process and leads teacher to make continual comments to student.

Suggest an action as a solution and how applying it

I suggest an action as a solution to solve this problem is to build a good relationship between teacher and student and building a level of trust amongst their students.

Evaluate your Action

After the evaluation of my action, it will lead to successful behavior management, because student behavior is a manifestation of beliefs, attitudes, emotions, and experiences. it will be a positive implementation.

A Word Describing your Experience of Teacher Training

I can say about my experience of teacher training that it was so wonderful period, I really enjoyed it and I felt that I am a real teacher.

This experience was very important to me. it made me think about to be a good teacher in the future and preparing myself to do my best to become a successful one in my domain.

my experience was typical to the quotation of Teton Lakota Indians "I tell me and I will listen, show me I will understand, involve me I will learn."

APPENDIX 29: the Twenty Fourth Action Research Diary

What do you think about the process of teaching in general

Teaching is one of the most complicated jobs today. It demands broad knowledge of subject matter, curriculum and standards; enthusiasm, a caring attitudes and a love of learning; knowledge of discipline and classroom management techniques; and a desire to make a difference in the lives of young people. Thus teaching is a pedagogical act (that contains a lot of questions like, who's the learner, what does he/she already know, which social background is the learner from, etc.

Problem :

As in every class, there are some problems faced by teachers in classrooms as well as behavior issues and then the problem affects the whole classroom. Behavior problems distract other students from learning and require teachers to spend precious instruction time on discipline and behavior management, to teach the lesson properly.

Clarifying the Problem

As in every class, there are always students whose English is, unfortunately, quite poor and, on the other hand, there are always students (but a small number of them) who speak English fluently, or most who tend to speak it fluently. However, teachers have problems with certain classes, because the climate (so to speak) in class is pretty alike. They all seem not to know even the basics, lack of motivation.

Suggest an action as a solution and how applying it

To be honest, ~~we felt~~ as a beginner, we don't have a clue how to deal with problems we face. However, how some teachers do ~~dealing~~ with the trouble maker, they ask them politely to stop, they try to keep his voice friendly and soft and try to assure them they are there only to ~~help~~ help them. If the trouble-maker goes on, they ask him nicely to wait for ~~them~~ them after the lesson finishes & talk to him.

Evaluate your Action

Usually, with these actions adopted by teachers, this helps and they immediately stop. By doing this they show him he's also a person, and you're only trying to be a friend, of course, nothing is 100% sure, but if this solves at least half of the problem, we can be satisfied.

A Word Describing your Experience of Teacher Training

I conclude by saying that this training was very interesting and beneficial experience from which I learnt a lot of things concerning teaching and, I felt a big change in my personality, I managed to overcome my complex and fear when facing a large number of pupils ~~because~~, I have really enjoyed this experience so much as well as teaching. Moreover, it gave me opportunity of meeting professionals in different subjects, who gave me different methods & strategies of teaching and also building a good relationship with ~~to a~~ students as well.

APPENDIX 30: the Twenty Fifth Action Research Diary

What do you think about the process of teaching in general

Teaching is a hard process that requires various characteristics to be involved in. So to succeed in the field of teaching you should be a good teacher.

Problem :

in the classroom, I hesitated I felt stressed and anxious, but once I started my lesson I felt at ease.

Clarifying the Problem

I felt about stress because I don't have enough experience, and I faced many faces of the pupils so it's normal.

Suggest an action as a solution and how applying it

I must be familiar with the pupils, and to control my self as to the problem of the anxiety will disappear.

Evaluate your Action

I did this action in successful way, then I saw that I succeed in managing the classroom.

A Word Describing your Experience of Teacher Training

During my training is ~~an~~ a great experience for me that I should go in to learn many things, I learnt learned many important things about the domain of teaching and learning and for me it is very important to train ourselves, so training is suitable.

APPENDIX 31: the Twenty Sixth Action Research Diary

What do you think about the process of teaching in general
For me teaching is transmitting knowledge, and educating or well educating the learners.
Problem :
I faced many problems, I've noticed many problems while I was observing the classes, but the problem that attracted me was, the lack of interaction.

Clarifying the Problem
I've seen a lot of pupils who refused to interact or to participate even though they know the answer, but they don't try.

Suggest an action as a solution and how applying it
Encouraging cooperation and collaboration like encouraging them to work in groups to try doing it.

Evaluate your Action
This solution really worked because I've noticed that they try to interact and to change their idea between each other and when we came to correct the activity the majority participate and try to give their answers.

A Word Describing your Experience of Teacher Training
For me, it was and it is the best experience I've ever lived, since my trainer was very helpful, and the pupils too. I've learnt lots of things.

APPENDIX 32: the Twenty Seventh Action Research Diary

What do you think about the process of teaching in general

Teaching is the process of sharing knowledge from one generation to another, it's a noble job and something that we should have in our mind is a hard task.

Problem :

The problem with learners is the differences in competences, it differs from one pupil to another.

Clarifying the Problem

The learners or the pupils they don't have the same competences, each one receives information in his way.

Suggest an action as a solution and how applying it

put the learners feel at ease, and do the best in order to make the courses understandable.

Evaluate your Action

The learners receive information and they don't feel problems and they do not find problems.

A Word Describing your Experience of Teacher Training

The training process let a touch in my studies, I passed unforgettable moments.

APPENDIX 33: the Twenty Eighth Action Research Diary

Suggest an action as a solution and how applying it

I suppose the use of some innovative materials to attract their attentions. for instance, we use the data-show in classrooms, it permits to teacher to gain the attention of pupils. Second, teacher should give activities to keep them calm.

Evaluate your Action

I've gave a sense of activities to students, the result is that I succeed to attract their attention

A Word Describing your Experience of Teacher Training

It is boring.

What do you think about the process of teaching in general

I think that the process of teaching is boring for me because it is the repetition of the same all over the time.

Problem :

hyper-activity learners

Clarifying the Problem

this problem consists in lack of concentrations of pupils in the classroom because they are in the top of their energy they are more talkative and make noises.

Résumé

Le présent travail a porté essentiellement sur l'étude de la contribution de la méthode « Recherche-Action » sur la pensée réflexive des étudiants stagiaires dans la formation des enseignants. La recherche s'est basée sur les étudiants de langue anglaise, option Didactique, en fin de cycle Master à l'Université de Bejaia. Pour effectuer la recherche, le modèle pré-experimental est adopté. L'expérience a duré deux mois où le groupe expérimental a appliqué la méthode « Recherche-Action » dans sa formation (stage). Pour accumuler des données, des outils qualitatifs et quantitatifs sont utilisés. Pour la méthode quantitative, on a employé un questionnaire pilote pour confirmer l'existence du problème, et l'échelle de la pensée réflexive pour tester l'amélioration de nos stagiaires après l'application de la méthode « Recherche- Action ». Concernant la méthode qualitative, on a utilisé le focus groupe pour évaluer le progrès de l'expérience, et des agendas rédigés par les participants comme une alternative à l'observation. Les résultats indiquent que les stagiaires ont développé leurs pensées réflexives sur leurs futur processus d'enseignement après qu'ils aient adopté la méthode « Recherche-Action » tout au long des deux mois de leur formation.