Islamic University

Deanship of Graduate Studies

Faculty of Education

Master of Curricula and teaching methods

الجامعـــة الإســـلامية – غـــزة

عمـــــادة الدراســـــات العليـــا

كليـــــــــــة التربيـــــــــــة

ماجستير المنـاهج وطـرق تـدريس

The Effectiveness of an Action Research-Based Training Program in Improving In-service Teachers` Techniques in Teaching English Language Skills and Areas

فاعلية برنامج تدريبي قائم على البحوث الاجرائية في تطوير أساليب المعلمين في تدريس مهارات اللغة الإنجليزية و أنظمتها اللغوية

By:

Amal Muhammed Hosni Abu Sharar

Supervised by

Dr. Sadek S. Firwana

Assistant Prof. of Teacher Education

A Thesis Submitted in Partial Fulfillment of the Requirements of the Degree of Master of Education and Curricula

Aug, 2016

إقـــــرار

أنا الموقع أدناه مقدم الرسالة التي تحمل العنوان:

The Effectiveness of an Action Research-Based Training Program in Improving In-service Teachers` Techniques in Teaching English Language Skills and Areas

فاعلية برنامج تدريبي قائم على البحوث الاجرائية في تطوير أساليب المعلمين في تدريس مهارات اللغة الإنجليزية و أنظمتها اللغوية

أقر بأن ما اشتملت عليه هذه الرسالة إنما هو نتاج جهدي الخاص، باستثناء ما تمت الإشارة إليه حيثما ورد، وأن هذه الرسالة ككل أو أي جزء منها لم يقدم من قبل الآخرين لنيل درجة أو لقب علمي أو بحثي لدى أي مؤسسة تعليمية أو بحثية أخرى.

Declaration

I understand the nature of plagiarism, and I am aware of the University's policy on this.

The work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted by others elsewhere for any other degree or qualification.

Student's name:	**Amal Muhammed Hosni Abu Sharar**	اسم الطالب:
Signature:		التوقيع:
Date:	17-9-2016	التاريخ:

بسم الله الرحمن الرحيم

الجامعة الإسلامية – غزة
The Islamic University - Gaza

مكتب نائب الرئيس للبحث العلمي والدراسات العليا هاتف داخلي 1150

الرقم Ref ج س غ/35/

التاريخ Date 2016/08/29م

نتيجة الحكم على أطروحة ماجستير

بناءً على موافقة شئون البحث العلمي والدراسات العليا بالجامعة الإسلامية بغزة على تشكيل لجنة الحكم على أطروحة الباحثة/ **امل محمد حسني ابو شرار** لنيل درجة الماجستير في **كلية *التربية*/ قسم مناهج وطرق تدريس** وموضوعها:

"فاعلية برنامج تدريبي قائم على البحوث الاجرائية في تطوير أساليب المعلمين في تدريس مهارات اللغة الانجليزية وانظمتها اللغوية."

The Effectiveness of an Action Research-Based Training Program in Improving In-service Teachers' Techniques in Teaching English Language Skills and Areas

وبعد المناقشة العلنية التي تمت اليوم الثلاثاء 27 ذو القعدة 1437هـ، الموافق 2016/08/30م الحادية عشر صباحاً في قاعة المؤتمرات بمبنى اللحيدان، اجتمعت لجنة الحكم على الأطروحة والمكونة من:

د. صادق سالم فروانة	مشرفاً و رئيساً	S. Farwana .....
أ.د. عزو اسماعيل عفانة	مناقشاً داخلياً	.....
د. سعيد حسن فرحات	مناقشاً خارجياً	.....

وبعد المداولة أوصت اللجنة بمنح الباحثة درجة الماجستير في **كلية *التربية*/**قسم **مناهج وطرق تدريس.**

واللجنة إذ تمنحها هذه الدرجة فإنها توصيها بتقوى الله ولزوم طاعته وأن تسخر علمها في خدمة دينها ووطنها.

والله ولي التوفيق ،،،

نائب الرئيس لشئون البحث العلمي والدراسات العليا

أ.د. عبدالرؤوف علي المناعمة

P.O. Box 108, Rimal, Gaza, Palestine fax: +970 (8) 286 0800 فاكس Tel: +970 (8) 286 0700 ص.ب. 108 الرمال، غزة، فلسطين هاتف
public@iugaza.edu.ps www.iugaza.edu.ps

Abstract

The Effectiveness of an Action Research-Based Training Program in Improving In-service Teachers` Techniques in Teaching English Language Skills and Areas

This study aimed to explore the effectiveness of an action research-based training program in improving in-service teachers` techniques in teaching English language skills and areas.

To answer the study questions, the researcher used the mixed-method approach and multiple case study with the study sample which consisted of (18) female in-service teachers from the Middle Directorate of Education who were purposefully chosen to take part in the action research-training program. The four-session training program acquainted the participants with the nature of action research, its steps, tools and the importance of reflection. After the first session of the program, the participants were to decide which language skills or areas they wanted to work on and try to improve through designing and conducting their own individual action research projects.

To be able to gather qualitative and quantitative data on which the mixed method approach relies, the researcher used five study tools; pre- post achievement test to measure the teachers' background knowledge of action research prior to and after the training program, a questionnaire to test the effect of the training program on the teachers' perspectives of their teaching techniques, an observation card administered to check whether teachers' application of their individual action research projects would improve their teaching, a focus group, and diaries. SPSS package was used to analyze the quantitative data, while the qualitative data was decoded using tables to anticipate common themes from the subjects' diaries and focus group meetings.

The results of the study indicated that the action research-based training program bears great potentials to improve teachers' teaching techniques of language skills and areas. Furthermore, it did positively affect teachers' perspectives and their abilities to conduct successful action research projects.

ملخص الدراسة

فاعلية برنامج تدريبي قائم على البحوث الاجرائية في تطوير أساليب المعلمين في تدريس مهارات اللغة الإنجليزية و أنظمتها اللغوية

هدفت هذه الدراسة الى قياس أثر فاعلية البرامج التدريبية القائمة على البحوث الاجرائية في تطوير أساليب تدريس المعلمين لمهارات اللغة الإنجليزية و أنظمتها اللغوية.

وقد استخدمت الباحثة منهج البحث الكمي و النوعي (المختلط) لتحقيق أهداف الدراسة و قد تم استخدام دراسة الحالة المتعددة لمجموعة الدراسة الواحدة المكونة من (18) معلمة، يعملن في مديرية التربية و التعليم– الوسطى و تم اختيار عينة الدراسة قصديا للمشاركة في البرنامج التدريبي الذي يتكون من 4 جلسات ، حيث تعرفت أفراد العينة إلى طبيعة البحث الإجرائي وخطواته و ادواته ، بالإضافة إلى أهمية التفكير التأملي في البحث الاجرائي. و مع نهاية اللقاء الأول، تم تكليف المشاركات بتنفيذ بحوثهن الإجرائية الفردية و ذلك من خلال تجريب طرق تدريس جديدة و توثيق أثرها على تدريسهن.

و قامت الباحثة بجمع البيانات الكمية و الكيفية التي يتطلبها منهج الدراسة باستخدام خمس أدوات للدراسة و التي اشتملت على: اختبار تحصيلي لقياس المعرفة النظرية لأفراد العينة بالبحث الاجرائي قبل و بعد البرنامج التدريبي، استبانة لدراسة أثر البرنامج على اتجاهات العينة نحو طرق التدريس التي تستخدمها، بطاقة ملاحظة لدراسة أثر البرنامج على تطبيق العينة لبحوثها الفردية، أمّا المجموعة البؤرية و المذكرات فتم استخدامها لجمع البيانات الكيفية لدعم النتائج و تفسيرها.

و تم تحليل البيانات الكمية احصائيا باستخدام برنامج الرزم الإحصائية للعلوم الاجتماعية ، أما البيانات الكيفية و التي تم جمعها من مذكرات عينة الدراسة و لقاءات المجموعة البؤرية فقد تم تحليلها من خلال جداول لاستنباط الأنماط العامة للبيانات .

و توصلت الدراسة إلى مجموعة من النتائج أهمها: يوجد أثر كبير للبحوث الإجرائية في تحسين أساليب مهارات تدريس اللغة الإنجليزية وأنظمتها اللغوية لدى المعلمات، بالإضافة الى تعزيز الاتجاه الإيجابي لهن نحو تحسين طرق التدريس و تعزيز قدرة المعلمات على تنفيذ بحوث إجرائية بشكل كبير.

﴿ وَقُل رَّبِّ زِدْنِي عِلْمًا ﴾

[طه : 114]

"My Lord, increase me in knowledge."

[Taha: 114]

Dedication

"To the soul of my beloved father, who always longed to this day, may his soul rest in peace,

"To my sacrificing mother, whose consecrated love and unconditioned support were beyond reckoning,

"To my beloved husband, who entrenched me with his care, understanding, love, and encouragement,

"To my brother"Akram", who always took pride in what I did, and whose stimulating words always pushed me forward,

"To my sons, Nadim, Rani, Faris, and Karam, who were passionately tolerant and understanding during this difficult and tiring journey,

"To my sisters and brothers, who happily assisted me and surrounded me with their love,

"To my friends and colleagues, who empowered me with their sincere advice and prayers,

"To all my English Language teachers who lovingly embraced the study ideas.

I dedicate this work.

ACKNOWLEDGEMENT

First and foremost, I am grateful to God for granting me the good health and wellbeing that were necessary to complete this study.

I would like to express my profound gratitude to the Islamic University Deanery of Graduate Studies and staff of Faculty of Education for enabling me to undertake this thesis.

I would like to acknowledge my sincere gratitude to my supervisor Dr. Sadek Firwana for his continuous support of my MA study, for his patience, motivation, and immense knowledge. His guidance and insightful remarks have helped me to steer in the right direction whenever he thought I needed them. Without his constant assistance and dedicated involvement in every step throughout the process, this thesis would have never been accomplished. I could not have imagined having a better supervisor and mentor for my thesis.

My deep gratitude and appreciation are paid to the panel of referees (juries of the tools of the study) for their valuable notes and recommendations concerning the validation of the tools.

I place on record my sincere thank you to my colleagues for their continuous encouragement and enlightening support. I also extend my gratitude to the schools' head-teachers and teachers who assisted me lavishly with data collection.

Special thanks and gratitude go to my husband for his unceasing support and understanding. I also extend my appreciation to my sons, loving mother, brothers and sisters for supporting me spiritually. Lots of thanks also go to m y friends who cherished me with love throughout this venture.

Last but not least, I render my infinite gratitude to all who helped.

Table of Contents

List of Tables

List of Figure

List of Appendices

List of Abbreviations

AR	Action Research
ELT	English Language Teachers
CLT	Communicative Language Teaching
SPSS	Statistical Package of Social Sciences

Chapter I
Introduction

Chapter I

Introduction

Introduction

Teaching is a sacred job. It aims at simultaneously building the whole person mentally, socially, affectively, behaviorally and spiritually. It is very complex where varied factors interact all together and orchestrate in support of students' learning. When language teaching in particular is in focus, the complexity is even greater, shaped by teachers` views of the nature of the language, of language teaching and learning in general, and their knowledge of the particular sociocultural setting in which the teaching and learning take place (Freeman and Martie, 2011).

Research has shown that language teachers share pedagogical knowledge that is different from that of teachers of other subjects. By becoming clear on where they stand, teachers can choose to teach differently from the way they were taught. Every year teachers teach groups of students with challenging individual personalities and distinct group dynamics and it is sometimes difficult to maintain a sense of excitement and with the business of teaching (Harmer, 2003).

The teachers` craft embodied in the knowledge about their major is integrated by the art of teaching. Stenhouse (1979) believes that the teacher is like a gardener who treats different plants differently, and not like a large scale farmer who administers standardized treatments as near as possible standardized plants.

The "one size fits all" teaching does not exist. Teachers need to be more critical, more inquisitive about many aspects of their teaching and more connected to their students' needs. Teachers play a key role in the success or failure of a planned innovation because they are the executive decision makers in the actual setting in which the intended innovation is to be integrated – the classroom.

Burns (2009) believes that good teaching is an art and a science. Action research provides teachers with the tools to enhance their art and improve their science.

In schools today, raising the achievement levels of all students must be our highest priority and the quality of the teacher should be on focus (Brown, 1994).

During my work as a teacher and a supervisor, I have observed the teachers` annoyance and feeling of loss whenever they encounter difficulties that challenge their practices. They try to experiment with different ideas which they believe they

may influence their practices inside the classroom positively. Although much research has been conducted to investigate classroom relevant issues, language teachers do not usually welcome those outsiders who do research and devise solutions to be applied later in the classroom by them. Providing teachers with varied strategies and techniques that have gained validity from researchers have proved to be unable to meet the diverse difficulties teachers face in teaching and hinder their professional growth. Teachers in the field need to be insider researchers who theorize about their own practices, hypothesize and test their assumptions and plan their own actions to reach conclusions, (Cohen & Manion, 1994).

Action research is an attractive approach where teachers identify a problem during the course of their work, investigate it and seek improvement in their practices. They become insider researchers researching their actions. As the name suggests, action research is a methodology which has the dual aims of action and research... action: to bring about change in some community or organization or program, research: to increase understanding on the part of the researcher or the client, or both (and often some wider community), (Dick, 1993). The linking between the terms "action" and "research" highlights the essential feature of the method: trying out ideas in practice as a means of improvement and increasing knowledge about the curriculum, teaching and learning (McTaggart, 1991).

Cohen and Manion (1994) describe action research as an on-the-spot procedure designed to deal with a concrete problem. It is a step-by-step process where varied mechanisms to collect data are used in the hope of making use of the feedback reached to make adjustments, directional changes, and redefinitions. It is an ongoing process where the task is not finished when the project finishes. Practitioners continue to review, evaluate, and improve practice. Action research is a catalyst for continuing professional development.

Improving in-service teachers' performance should focus on providing them with the ways to explore their own classrooms. But such involvement presupposes certain skills and knowledge in classroom observation (Nunan & Richards, 1994, p.62). The significance of the evidence to 'reflection on action' cannot be overstated. Through the systematic gathering and analysis of data, teachers can ascertain how well the course of action has been implemented (Gallgher & Bashir, 2007). When teachers want to conduct an action research project, they enter into a cycle of investigation that includes the following steps:

1. Identifying an issue
2. Reviewing literature on issue and asking questions to narrow focus of issue.
3. Choosing method of data collection
4. Collecting, analyzing and interpreting information
5. Developing, implementing and monitoring action plan

Action research generally involves inquiring into one's own practice through a process of self-monitoring that generally includes entering a cycle of planning, acting, observing and reflecting on an issue or problem in order to improve practice (Wallace, 1991). An action-research–based training program aims to equip English language teachers with those necessary tools and mechanisms to act as practitioner researchers to improve their techniques in teaching language skills and areas.

1.1 Statement of the problem:

In-service teachers need to learn and embrace the concept that may help them assume personal responsibility for improving their own practices. They need to lay a solid foundation for their professional development and cement their abilities to act on their own. Therefore, action research arises as an invitation to learn, and a means to tackle tough questions that face them in the classroom setting. Hence, the problem is comprised in the research question that follows.

What is the effectiveness of an action research-based training program in improving in-service teachers` techniques in teaching English language skills and areas?

1.1.1 Study Sub-questions:

From the study main question stem the following sub-questions:

1. What is the nature of the action-research-based training program intended for improving in-service teachers` techniques in teaching English language skills and areas?
2. Which English language skills and areas are intended to be enhanced by in-service teachers' improved teaching techniques acquired through the action research -based training program?

3. Are there statistically significant differences at ($\alpha \leq 0.05$) between the mean scores of the teachers' background knowledge of action research prior to and after their involvement in the action research-based training program?
4. Are there statistically significant differences at ($\alpha \leq 0.05$) in the teachers' involvement in the action-research based training program and their perspectives of teaching English language skills and areas?
5. Are there statistically significant differences at ($\alpha \leq 0.05$) between the mean scores of the teachers' application of action research prior to and after their involvement in the training program?

1.2 Study Hypotheses:

The primary research hypotheses were as follows:

1. There are no statistically significant differences at ($\alpha \leq 0.05$) in the mean scores of teachers' background knowledge of action research prior to and after their involvement in the training program.
2. There are no statistically significant differences at ($\alpha \leq 0.05$) in the mean scores of teachers' perspectives of teaching language prior to and after their involvement in an action-research based training program.
3. There are no statistically significant differences at ($\alpha \leq 0.05$) in the mean scores of teachers' application of the action research prior to and after their involvement in the training program.

1.3 Purpose of the study:

1. To find out the effectiveness of an action-research-based program in improving in-service English language teachers` performance while teaching language skills and areas.
2. To measure the teachers' background knowledge of action research prior to and after their involvement in the action-research based training program.
3. To describe and enhance in-service teachers' understanding and application of action research-based programs.
4. To measure the teachers' perspectives and attitudes about action research after engaging in the program and carrying out their own action research.

1.4 Significance of the study:

Action research can be a worthwhile pursuit for educators for a number of reasons. Foremost among these is simply the desire to know more. It may influence thinking skills, self-efficacy, willingness to share and communicate, and attitudes toward the process of change.

The implications of this study can be exploited by:

a) In-service English language teachers:

This study is supposed to help in-service English language teachers look critically at their performance in the classrooms and try to enhance them to become a researcher model capable of observing, planning and reaching conclusions. It enables them to look for ways to expand upon their existing knowledge. It also helps them further their knowledge of action research and consequently transform this knowledge into something meaningful.

b) Faculties of Education in universities:

The study aims to draw the universities' attention to increase their foci on action research-based programs and their importance in methodology courses.

c) Supervisors and Mentors:

This study seeks to raise supervisors` and mentors` awareness of the advantages of implementing action research-based programs in our schools and training our teachers to act as researchers to solve the many problems they face while teaching.

1.5 Operational definitions of the terms of the study:

Action research:

Action research combines a substantive act with a research procedure. It is an action disciplined by enquiry, a personal attempt at understanding while engaged in a process of improvement and reform.

Action research-based training program:

It is a program devised by the researcher using the method of action research to deal with techniques of teaching a skill or an area of English language. After training in-service English language teachers and choosing the sample, the participants had to choose a skill or a language area to improve their techniques of teaching it using the cycle of action research they were trained on by the researcher.

They had to identify the problem, reflect on it and think of a possible intervention to solve it after collecting relevant data. Diaries in a form of grids were prepared by the researcher to allow the participants note important data during the application of action research. Moreover, the focus group meetings were regularly held to further assist the teachers with their projects.

In-service English language Teachers:

In-service English language Teachers are all teachers teaching English to all grades from 1st to the 12th grade.

English language techniques:

English language techniques are the steps used by the teacher in the classroom. It is what the teacher does in the classroom to implement a method which is, in turn, consistent with an approach.

English language skills:

English language skills include speaking, listening, reading, and writing.

Language Areas:

Language areas include vocabulary, grammar, pronunciation, and functions.

1.6 Limitations of the study:

1. The study was applied on in-service English language teachers in Middle Directorate of Education.
2. The study was conducted within the school year 2015-2016 second semester.

Summary

This chapter viewed the study background, the study problem, the study sub-questions and hypotheses. It also tackled the purpose of the study and its significance. In addition, it outlined the limitations and the operational definitions of the study key terms. The next chapter will focus on the review of literature and related previous studies.

Chapter II
Literature Review

Chapter II

Theoretical Framework

Introduction

This chapter is divided into two sections. The first section includes the literature review which deals with teacher training, in-service professional development and action research as a catalyst for teachers' professionalism. The second section discusses related previous studies pertinent to the study variables. In addition, it presents the researcher's commentary on those studies.

2.1 Section A

Literature Review

This section presents a synthesis of literature focusing on teacher training, in-service professional development and action research as a viable means for teachers' professionalism.

2.1.1 Teaching profession and Teachers

Teaching is a complex, challenging, and often uncertain process. There are no absolute answers to how best to teach school children. However, research has shown that teachers tend to believe there is some set of "right answers" to the problems of teaching. Teaching is more than a technique. It is a process involving continual inquiry and renewal, and a teacher, among other things, is at first and foremost a questioner (Field, 1997).

2.1.2 Language teaching and teacher education

Languages are international channels of communication especially in the twenty first century where the world has become a global village. Language teachers have to take on the responsibility of their professional development and to shoulder their growth.

The adjective "professional refers to something that has been well-done. Professional development refers to many types of educational experiences related to an individual's work. Wallace (1991) notes that the title "profession" bears some of the following qualities: a basis of scientific knowledge; a period of rigorous study which is formally assessed; a sense of public service, high standards of professional

conduct; and the ability to perform some demanding and socially useful tasks in a competent manner. Both pre-service and in-service teachers' training aims to recruit available equipment to ensure professionalism and self-efficacy which will consequently reflect positively on students' achievement and learning outcomes as well.

Cochran-Smith and Lytle (1993, p.43) outlined the importance of teachers' ways of knowing through systematic subjectivity, and teacher emic or " insider's perspective that makes visible the ways students and teachers together construct knowledge and curriculum". They distinguish among three conceptions of teacher education. The first of these is knowledge for practice, in which university researchers generate formal knowledge and theory for teachers to use to improve practice. Within this conception of teacher learning, teachers are viewed primarily as consumers of research. The second conception is knowledge in practice, in which the emphasis is on knowledge in action, knowledge that is embedded in the exemplary practice of experienced teachers. The knowledge in action conception suggests that good teaching can be coached and learned through reflective supervision or through process of coaching reflective teaching. Learning is viewed as assisted performance. The third conception of teacher learning is knowledge of practice, which assumes "that the knowledge teachers need to teach well emanates from systematic inquiries about teaching, learners and learning, subject matter and curriculum, and schools and schooling. This knowledge is constructed collectively within local and broader communities" (Cochran-Smith & Lytle, 1999, p. 279). Within this conception of teacher learning, there are no distinctions between formal and practical knowledge. Teachers are viewed as constructors and generators of knowledge and curriculum. Knowledge of practice and teacher research are viewed as mutually interchangeable. Cochran-Smith and Lytle (1999) argue that teacher inquiry is a powerful way of articulating local knowledge and for redefining and creating a new knowledge base for teaching and learning.

2.1.3 Approaches to Teachers' Training- (Wallace's model)

According to Wallace (1991), there are three major models of language teacher training.

2.1.3.1 **Crafts or apprenticeship model**

In this crafts or apprenticeship model, less experienced teachers learn through observing those with more experience. It is identical with how a new worker learns to do routine tasks. This training procedure was called 'Sitting with Nellie', Nellie being an experienced worker who had been doing routine tasks for years.

2.1.3.2 **Applied science or theory-to-practice model.**

In the applied science or theory-to-practice model, the findings of scientific knowledge and experimentation are conveyed to the trainee teachers by experts in the relevant areas. Then the trainees have to put these conclusions into practice and apply them in real-world contexts.

2.1.3.3 **Reflective model**

The importance of continuing, lifelong, professional development of language teachers has been asserted by many writers. Schon (1983:24) defines the reflective teacher as someone "who is discovering more about his/her own teaching by seeking to understand the processes of teaching and learning in his/her own and others' classrooms". Reflective teaching enables teachers to reflect upon, evaluate, and adapt their own practices.

2.1.4 Freeman's Model of Teachers' Training

The three models discussed above broadly correspond to the three views of teaching identified by Freeman (1991; 1996):

1) **Teaching as doing** (a behavioral model emphasizing what teachers do and encouraging a skills or a crafts model of teacher education);
2) **Teaching as thinking and doing** (a cognitive model emphasizing what teachers know and how they do it, encouraging both theory and skill development)
3) **Teaching as knowing what to do** (an interpretive view emphasizing why teachers do what they do in different contexts, encouraging the addition of reflection and the development of frameworks of interpretation to theory and skill development in teacher education).

2.1.5 The impact of successful teachers' training on students' learning

A good quality teacher can guide the learning process of children making learning relevant and stimulating. Teacher training fosters the teachers' abilities to hold key factors to success in their classes. Gaining both the art and the craft of the profession of teaching alongside with successful training may well enhance the quality of teaching provided, that may help them modify or adapt their teaching performances (Hord & Sommers, 2008).

2.1.6 Which Model best suits Teacher Training?

Wallace's three models of language teacher education or Freeman's models are likely to be needed in all teacher development, but in different degrees, depending upon teachers' experience and understanding. However, neither traditional education nor training is sufficient. Teachers also need opportunities to reflect upon their beliefs and practices and to construct and reconstruct their personal theories of language teaching and learning. Richards (1990) claims that teaching depends upon integrating the application of appropriate theory, the development of careful instructional designs and strategies, and the study of what actually happens in the classroom.

2.1.7 Reflective Teaching as Classroom Inquiry

Reflection is a type of thinking associated with deep thought, aimed at achieving better understanding. Reflective teaching is a systematic and structured process in which we look at concrete aspects and learning with the overall goal of personal change and practice. Teachers should systematically study their own practices and seek deeper insights into their classrooms. This requires collecting first-hand organized data from their classrooms, analyzing and reflecting on it. Within the concept of reflective teaching, three emphases can be traced: classroom-based inquiry, teacher as researcher, and action research. (Wallace, 2000)

a. Classroom-based inquiry

Classroom-based inquiry aims at developing a reflective approach to teaching in which teachers and student teachers collect data about teaching, examine their attitudes, beliefs, assumptions, and teaching practices, and use the information obtained as a basis for critical reflection on teaching. Such a method aims basically at obtaining first-hand data as a basis for reflection (Richards & Lockhart ,1994).

b. Teacher as researcher

Some researchers such as Lier (1988), Bailey's (1991) and Nunan (1989) suggest that one way to bridge the gap between theory and practice, as well as that between researcher and teacher, is to involve teachers into classroom research. Teachers benefit from adopting an experimental approach to incorporating these ideas into their classrooms. By establishing a small-scale classroom experiment to monitor, observe and document the effect of the new methods or materials, teachers will find it far professionally rewarding than being told what to do from outsider researchers. (Nunan, 1989:98)

c. Action research

Most writers like Kemmis and McTaggart (1988), Carr and Kemmis (1986), and Elliott (1991) would agree on two defining characteristics of action research: first, action research originates from a problem in classroom teaching; second, classroom inquiry should lead to teacher action. The purpose of action research is not to turn the teacher into a researcher, but to help him or her to continue to develop as a teacher, using action research as a tool in this process and a means to an end. (Corey, 1953)**.**

2.1.8 A Brief History of Action Research

The idea of using research in a natural setting to change the way that the researcher interacts with that setting can be traced back to Kurt Lewin, a social psychologist and educator. Lewin is credited with coining the term 'action research' to describe work that did not separate the investigation from the action needed to solve the problem. His process was cyclical, involving a "non-linear pattern of planning, acting, observing, and reflecting on the changes in the social situations" (McFarland & Stansell, 1993, p.14).

Corey (1953, p.70) who was among the first to use action research in the field of education, summed his belief about action research as follows.

> We are convinced that the disposition to study…the consequences of our own teaching is more likely to change and improve our practices than is reading about what someone else has discovered of his teaching.

Action research with its dual goals to achieve both action and research enables teachers to find a way through. The action aim is to bring about change or

improve practice in some community or organization, program or intervention; and the research aim is to increase or generate knowledge and understanding on the part of the researcher or the client or both, or some other community (Dick, 1992).

2.1.9 Definition of Action Research.

Action research is not about hypothesis testing and producing empirically generalizable results. Rather than dealing with the theoretical, action research allows practitioners to address those pressing concerns that are closest to them, ones over which they can exhibit some influence and make change (Ferrance, 2000). Also, action research is a process of systematic inquiry and a small-scale investigation undertaken by a class teacher to find effective solutions to real problems encountered in daily life and inform future practices (Ferrance, 2000; Field, 1997; Corey, 1953).

Kemmis and McTaggart (1988, p.p5-6) took the definition of action research further and defined it as follows:

> … a form of collective self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own social or educational practices, as well as their understanding of these practices and the situations in which these practices are carried out.

Nunan (1992) and McTaggart (1991) emphasize the practical focus of action research. While Nunan believes teacher-research should stem out of the problems and issues which confront teachers in their daily work, Kemmis and McTaggart (1988, p.21) explain:

> The linking of the term "action" and "research" highlights the essential feature of the approach: trying out ideas in practice as a means of improvement and as a means of increasing knowledge about the curriculum, teaching, and learning. The result is improvement in what happens in the classroom and school, and better articulation and justification of the educational rationale for what goes on.

Action research has an emancipatory nature as it demands that practitioners take a hard look at and gain insight on the structures and social arrangements that dominate segments of the population that teachers themselves might reinforce. Furthermore, Richards, and Platt (1992) believe that the purpose of action research is to stretch the teacher's understanding of classroom teaching and learning and to bring about improvements in classroom practices. Another important feature of

action research was drawn by Cohen and Manion (1994) who describe action research as essentially an on-the-spot procedure designed to deal with a concrete problem located in an immediate situation. However, the task is not finished when the project ends. The participants continue to review, evaluate and improve practice.

Some educators view action research as a type of applied research in which the researcher is actively involved in the cause for which the research is conducted. Action research is not, of course, limited to projects carried out by teachers in an educational setting. It is appropriate in any context when 'specific knowledge is required for a specific problem in a specific situation, or when a new approach is to be grafted on to an existing system' (Cohen & Manion, 1994).

2.1.10 Types of Action Research

There are different types of action research depending upon the participants involved.

a) Individual teacher research:

Individual teacher research usually focuses on a single issue in the classroom. These issues may include problems of classroom management, instructional strategies, use of materials, or student learning. Such problems are evident in the classroom and can be addressed on an individual basis.

b) Collaborative action research:

Collaborative action research may include as few as two teachers or a group of several teachers and others interested in addressing a classroom or department issue. This issue may involve one classroom or a common problem shared by many classrooms.

c) School-wide research:

School-wide research focuses on issues common to all. They may include a school's concern about the lack of parental involvement in activities, for example, and is looking for a way to reach more parents to involve them in meaningful ways. Or, the school may be looking to address its organizational and decision-making structures.

2.1.11 The Need for Action Research in Teacher Training

The secret of success in the profession of teaching is to continually grow and learn. Action research is a way for teachers to continue to grow and learn by making use of their own experiences. It is a form of staff development that encourages and

develops the skills of educators to become more reflective practitioners, more problem solvers, and more thoughtful decision makers. Sagor (2000) claims that when reflections on the findings from each day's work inform the next day's instruction, teachers cannot help developing a greater mastery of the art and science of teaching. It bears the potential to increase the amount they learn consciously from their experience.

2.1.12 The Process of Action Research.

The process of action research provides a structured, disciplined approach to reflecting about the teaching and learning process. Teacher research is largely about developing the professional dispositions of lifelong learning, reflective and mindful teaching, and self-transformation (Mills, 2011). Although each of the models in Table (2.1) uses different words, in essence, they each include using data to act or react to a defined problem or area of concern.

There have been many suggested models of the process of action research. However, most writers on action research, e.g. Zeichne (2007), Feldman (2003), and Calhoun (1994) would view it as a spiraling process that facilitates planning, acting, collecting data, observing, reflecting, analyzing, reacting, and evaluating in a manner that is systematic but flexible in nature. Most models have the five steps in common as shown in the table below.

Table (2.1) : Five-Step Action Research Processes

5-Step Process	Sagor Model	Kemmis & McTaggert Model	Calhoun Model
Step 1	Problem Formulation	Planning	Selecting the Area of interest
Step 2	Data Collection	Acting	Collecting Data
Step 3	Data Analysis	Observing	Organizing Data
Step 4	Reporting of Results	Reflecting	Analyzing and Interpreting Data
Step 5	Action Planning	Re-planning	Taking Action

2.1.13 The Steps of Action Research Cycle:

Action Research is recursive in nature that runs through repeated cycles. Teacher-researchers frequently work simultaneously within several research cycles and circle back to readdress issues and modify research questions based on reflection and first-hand data collected. Ado (2013) claims these cycles of action research rest on the beliefs that educators better serve their students when they examine and reflect upon their practice and when they specifically consider ways to address challenges that exist in their practice.

In conducting action research, action researchers undergo five phases of inquiry as shown in Figure (2.1) below:

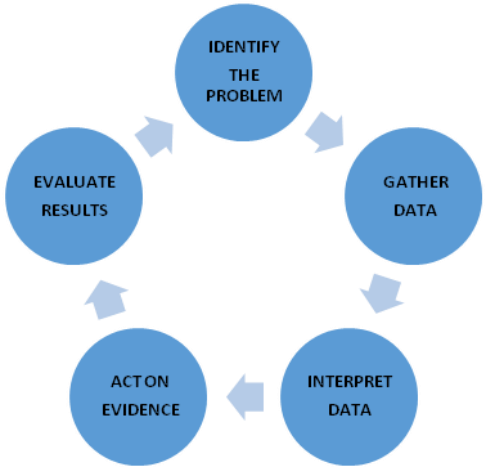

Figure (2.1): Action Research Cycles

1. Identify a problem area

Diverse questions may confront teachers in the classroom setting and therefore they wish to investigate them. To be a reflective teacher means thinking beyond one's instructional techniques; that is, it should also cover the "why" issues, not just "how to" problems. Barlett (1990) stressed that teachers should continue to explore in cycles of reflection throughout their careers. Some of the questions teachers should interrogate include the following:

- What do I do as a teacher?
- What is the meaning of my teaching?
- How did I come to be this way?
- How might I teach differently?
- What and how shall I now teach?

However, it is noteworthy that teachers should limit the question to one that is meaningful and doable within the confines of their daily work. They should cater for careful planning at this first stage so as to limit false starts and frustrations. An important guideline in choosing a question is to ask if it is something over which the teacher has influence. Is it something of interest and worth the time and effort that will be spent on it? Sometimes there is a discrete problem that is readily identifiable. Or, the problem to be studied may come from a feeling of discomfort or tension in the classroom. Therefore, the chosen questions should be:

- A higher-order question- not a yes/no.
- Stated in common and clear language, avoiding jargon.
- Concise.
- Meaningful.
- Already unanswered.

2. ***Gather Data***

The collection of data is an important step in deciding what action needs to be taken. Multiple sources of data are used to better understand the scope of happenings in the classroom or school. So many criteria are to be guarded when gathering data.

a. Select the data that are most appropriate for the issue being researched.
b. Is the data easy to collect?
c. Are there sources readily available for use?
d. How structured and systematic will the collection be?
e. Use at least three sources (triangulation) of data for the basis of actions.
f. Organize the data in a way that makes it useful to identify trends and themes.

Tools of Data gathering:

Data gathering tools are varied as outlined in table (2.2).

Table (2.2) : Data Gathering Tools

Journals	individual files	logs of meetings	videotapes	case studies
Surveys	records – tests	report cards	attendance	self-assessment
samples of student work	Projects	performances	interviews	portfolios
Diaries	field notes	audio tapes	Photos	memos
questionnaires	focus groups	anecdotal records	checklists	

3. Interpret Data

In line with the nature of the question, action researchers analyze and identify relevant data. Some of the data is quantifiable and can be analyzed without the use of statistics or technical assistance. Other data, such as opinions, attitudes, or checklists, may be summarized in a table form. Data that is not quantifiable can be reviewed holistically and important elements or themes can be noted.

4. Act on Evidence

Having used the information from the data collection and reviewed of current literature, a plan of action is set to enable action researchers to trigger a change and to investigate that change. It is important that only one variable be altered. As with any experiment, if several changes are made at once, it will be difficult to determine which action is responsible for the outcome. While the new technique is being implemented, data is continually documented and collected on performance.

5. Evaluate Results

Assess the effects of the intervention to determine if improvement has occurred. If there is improvement, do the data clearly provide the supporting evidence? If no, what changes can be made to the actions to elicit better results? As a result of the action research project, identify additional questions raised by the data and plan for additional improvements, adjustments, revisions, and next steps.

2.1.14 Distinguishing Features of Action Research

Some of the distinguishing features of action research are outlined as follows:

- **It is about action and research**

It is action that is intentionally researched, and research that is designed to inform subsequent actions. It is about research in action, rather than research on action. It is grounded on the reality that understanding classroom actions always takes place in context and must be understood in context. Classrooms and schools become sites where new meanings and understanding are created and shared.

- **It is cyclical and evolves**

It goes through cycles. There can be cycles within cycles. Over time, a particular piece of action research may evolve into something quite different from its start. Moreover the research does not finish once the task finishes. A new research may develop in view of the findings inferred.

- **Each stage of the cycle is rigorous**

The cycle does not just happen. Accepted and appropriate methods of acting, observing, reflecting and planning are used in each cycle.

- **It is critical**

Successful action research is based around shared curiosity not individual certainty,. Action research works less well if people seek to prove the correctness of their own ideas. Indeed, people are expected to put their practices, ideas, and assumptions to the test by gathering evidence that could convince them that those practices, ideas and assumptions may be wrong.

- **It tends to be collaborative**

There is no distinction made between those involved in the "action" and those involved in the "research". Everyone can be involved in both. The aim is to establish self critical groups or communities participating in all stages of the cycle.

- **It often starts with an engaging question**

Since action research is both action and research oriented, the inquiry starts best with an initial question that is action oriented. Those involved in a particular piece of action research will have many different perspectives and expectations.

- **It is Qualitative**

It is more interested in capturing stories of change, than statistics.

2.1.15 Benefits of Action Research

Mills (2011) outlines the goal of educators conducting action research as: "gaining insight, developing reflective practice, effecting positive changes in the school environment, and improving student outcomes and the lives of those involved". Action research yields many benefits for educators who self-study their

classrooms and seek improvements of their classrooms and their professional development as well. Such benefits of action research include the following:

- It bridges the gap between theory and practice and helps practitioners develop new knowledge directly related to their classrooms.
- It facilitates teacher empowerment. Teachers are empowered by enabling them to collect their own data to use in making deliberate decisions about their schools and classrooms.
- When teachers are allowed to take risks and make changes to teaching and learning, student achievement is enhanced, and schools become more effective learning communities.
- It is an effective and worthwhile means of professional growth and development.
- It offers a way for teachers to reflect critically on their practice.
- It stimulates change in the teachers' thinking and practice.
- It promotes self-improvement and self-awareness.
- It can empower teachers to take leadership roles in their local teaching contexts.
- It enables teachers to build up their own theories of change and consistently testing them against new situations. They become critical consumers of management theories and able to sort out promising ideas from empty ones.
- Action research involves exploratory engagement with a wide range of existing knowledge.

Broadly speaking, action research provides the means by which professional people may increase the effectiveness of the work in which they are engaged.

2.1.16 Action Research Challenges

In addition to the numerous benefits action research offers educators, there are several challenges and cautions associated with this research methodology which are as follows.

- It is a time-consuming process to conduct research in addition to the demands of their own instructional practice.
- Some authors see the combination between teaching and researching as detrimental to the quality of instruction given.

- Since action research is carried out by individuals who are interested parties in the research, the validity of collected and analyzed data may be questionably biased and they may not be able to attain an objective viewpoint.
- Another challenge faced by action researchers is to suspend any preconceived ideas of what the potential solution to the problem might be. Wallace (1998, p.13) has cautioned that thinking more about teaching does not always result in improved practice. He explained:

  > Contemplating problems does not necessarily lead to solving them. Indeed sometimes such a process is not even therapeutic: mentally rehearsing certain experiences can lead to an intensification of unpleasant emotions without suggesting any way forward'.

- If teachers are to implement action research on a regular basis, they definitely need for a support group to guide them through the research process which might include those who have successfully conducted action research studies themselves, or those interested in school administrators, or university consultants.
- Some of the frustrations involved in the process emerge from difficulty in asking the right questions and narrowing the focus of these questions.
- Selecting or constructing the appropriate instruments; and formulating a simple, yet workable, research design represent further challenges.

2.2 Section ''B''
An Overview of Previous Studies

Introduction

Section "B" focuses on reviewing previous related studies to the topic of this study. Many studies examined the role of action research to foster teachers' proficiency and enhancing the teacher researcher model as a lifelong mechanism to help them dig deeper into their practices and improve accordingly. Section "B" is divided into two domains: the first domain includes previous studies that discussed the role of action research in empowering professional development, and the second part will focus on using action research to improve English language teaching techniques.

2.2.1 A: Studies Related to Action Research for Professional Development

Gungor (2016)

Gungor's (2016) study titled "**Turkish Pre-Service Teachers' Reflective Practices in Teaching English to Young Learners''** is an action research study that identifies the gap that pre-service teachers experience between the theoretical considerations and realities of teaching, and the problems they face in teaching English to young learners. It supports in monitoring and evaluating themselves in a pre-service teacher education program in Turkey. It also aims to promote reflective practice at the pre-service level in teaching English to young learners through video recorded microteaching sessions, reflective journals, and lesson plans of pre-service teachers. The study findings highlighted the contribution of these reflective tools to pre-service teachers' professional development, self- and peer-reflections and the preparedness to teach English to young learners. Recommendations were put forward concerning teacher educators and pre-service programs to promote reflective practice and make methodology courses more beneficial before pre-service teachers embark on their practicum experience.

Kayaglu (2015)

Kayaglu's (2015) study titled "**Teacher Researchers in Action Research in a Heavily Centralized Education System**" was undertaken to examine whether the notion of action research by teachers was a viable option for in-service teacher development, whether teachers have any vision of what they can achieve with action research, whether there is skepticism on the part of teachers about the effectiveness and feasibility of action research as practice-based undertaking, and whether there are inherent structural problems that preclude teachers from assuming such a role. The sample consisted of three English language teachers who were involved in this action research. The findings indicated that teachers, being capable of carrying out action research, were quite positive about action research and hopeful for overcoming some challenges in their educational environment, making it an asset for personal-professional development despite a highly centralized education system.

Hine & Lavery (2014)

Hine and Lavery's **(2014)** study titled **''The importance of action research in teacher education programs''** examined three testimonies of the experiences of three teacher–researchers. Action-research based programs were conducted by the three teachers to outline the construct of action research in the light of its applicability to educational research. The researchers used a qualitative paradigm, individual case studies. Data collection was taken from three 40-minute-semi-structured interviews. The findings of the study reassured action research as a valuable methodology to facilitate teachers' empowerment and affect their professional growth and development positively. It also mentioned the challenges encountered when conducting an action research and the limitations of generalizing findings of action research-based projects.

Shanks, et al. (2012)

Shanks, et al.'s **(2012)** study entitled "**Action Research in a Professional Development School Setting to Support Teacher Candidate Self-Efficacy''** discusses pre-service teachers' use of action research in a professional development school setting. Pre-service teachers were placed in a PDS site that focuses on internationalizing education and on teaching languages. The teacher candidates were responsible for planning, teaching, and assessing language instruction in their

classrooms. The pre-service teachers implemented action research which helped them adjust to their teaching responsibility. They collected and reflected on their action research data, used it to understand their practice, and then made plans accordingly to improve their practice. This process was empowering and helped pre-service teachers foster their confidence and competence.

Ahmadian & Tavakoli (2011)

Ahmadian and Tavakoli's thesis (2011) titled "**Exploring the Utility of Action Research to Investigate Second-Language Classrooms as Complex Systems''** discusses how action research can trigger changes for the better and its potential to assist teachers to further their teaching skills and develop a deeper understanding of themselves, their classroom and their learners. However, in the area of applied linguistics, the viability of action research has been seriously questioned. The researchers argue that adopting a complexity-theory perspective, which requires teachers to be dynamic and complex in their approach, helps in identifying action research as a suitable research tradition for investigating second-language classrooms and in turn using it widely to invigorate the field of applied linguistics. Their argumentation is supported by the fundamental links between action research and complexity theory as an emerging paradigm in education. Although the case made in this article concerns second-language classrooms, the conclusions reached may well apply to any classroom that shares some commonalities with second-language classrooms.

Tomas (2011)

Tomas' study **(2011)** titled **"Becoming a Teacher Leader through Action Research"** examined what action research is and how it will help new teachers become effective teacher-leaders. It aimed at bridging the gap between pre-service teachers' fieldwork and student teaching where they rarely get the chance to implement and research how teaching techniques will work in their own classrooms. Action research provides them with the opportunity to systematically incorporate these techniques into their classrooms while investigating their usefulness. It is a tried-and-true professional development tool called "action research." Action research will develop new skills necessary to reflect on and evaluate their students' learning in addition to their own teaching practices. Action research symbolizes one

mechanism that may help the beginning teacher succeed in making the transition from being a student teacher to managing his or her own successful classroom.

Brown (2002)

Brown's (2002) study titled **''Improving Teaching Practices through Action Research**" investigated teachers' perceptions of the influence of action research on their thinking about their instructional practices and the impact on teaching performance. To reach answers to the questions of the research as to how much action research affects classroom teaching practices, the researcher used a qualitative method, a case study methodology. The data were collected from interviews with teacher researchers, informal classroom observations, and collection of teacher and student works and related artifacts. The results showed that engaging the teachers in the stages of action research provided them with a methodical structure for implementing and analyzing the teaching and learning process and gave them insight into their classroom practices.

Gore & Zeinchner & Kenneth (1991)

Gore & Zeinchner & Kenneth's **(1991)** study titled **''Action Research and reflective teaching in pre-service teacher education: A case study from the United States''** investigated the role of action research and reflective in pre-service teacher education. The sample of the study consisted of 18 students to examine the place of Action Research in Wisconson student teaching curriculum and of the way action research is facilitated by one supervisor .The written reports of the action research projects were analyzed for evidence of the favoured view of action research and reflective thinking. The researcher speculated why they didn`t find much evidence of attention to the critical domain of reflection as they had hoped. He suggested several possible changes in student teaching course that grow out of their analysis of action research reports.

2.2.2 B: Studies Related to Action Research to improve teaching techniques.

Tang, et al. (2016)

Tang, et al,'s study (2016) titled **''Action Research on the Development of Chinese Communication in a Virtual Community''** was designed to determine if language acquisition can occur in a virtual situation without explicit instruction. After spending 1 year establishing a virtual community, the authors observed and analyzed interpersonal interactions and the development of Chinese communication competence, communication models, and interaction frequency. The results of the action research revealed that language acquisition can be improved autonomously in a virtual situation, communication competence occurs in a loop of processes that include receiving, exploring, dialogue, assimilation, adaptation, asking questions, problem solving, and conversation, social interactions and a friendly environment are the most crucial factors in a virtual community, and community consensus, individual motivation, individual personalities, speaking behaviors, language competence, and leading techniques affect how individuals develop communication competence.

Trivino & Andrea (2016)

Trivino and Andrea's **(2016)** study titled **''Using Cooperative Learning to Foster the Development of Adolescents' English Writing Skills''** comprised a sample consisting of seventh grade teachers at a Colombian public school who chose cooperative learning as a strategy to improve student's social performance and as a tool to get learners to enrich their academic level. The study methodology was an action research and innovation project that focused on the results of eight students obtained in their written performance in English classes during three cooperative lessons. The study benefitted from some existing research on writing skills and cooperative learning and a presentation and analysis about students' real expectations and thoughts about writing in the English language. The systematization of this teaching experience also sheds light on further actions to analyze closely students' texts construction in a cooperative environment.

Whankhom, et al. (2016)

Whankhom, et al.'s (2016) study titled "**Development of the Instructional Model of Reading English Strategies for Enhancing Sophomore Students' Learning Achievements"** Investigated the use of action research in developing and verifying the effectiveness of an instructional model of reading English strategies for students. Classroom action research techniques with the two groups of sample: 34 sophomore physical students as a control and 32 sophomore sport science students as an experimental were administered. The study used four instruments; questionnaires, semi-structured interviews, reading comprehension achievement, and the 5-lesson plans. According to the results of the implementation of reading strategies, average score of total reading strategy used was moderate practice. Sample group employed slightly more indirect strategy to direct strategy, among six categories of reading strategies, the most to the least current implementation of reading strategies were compensation strategies, social strategies, affective strategies, memory strategies, cognitive strategies and meta-cognitive strategies, respectively. The developing instructional model comprised of informs, model and practice. The results concluded that the implementation of reading strategy was found effective.

Gutiérrez, et al. (2015)

Gutiérrez, et al.'s (2015) study titled "**Using Pictures Series Technique to Enhance Narrative Writing among Ninth Grade Students at Institución Educativa Simón Araujo''** reports an action research on the use of pictures series technique to develop EFL narrative writing among a group of ninth graders. It involved experimental and control groups. During the implementation of the strategy, the experiment group was taught writing with picture series technique and the process-based approach to determine whether the program of intervention achieved the intended results (cause and effect) concerning the research question to resolve the problem of investigation, while the control group was taught only with process-based approach. The tools included a post-test (achievement test) to measure the effect of the intervention process. The obtained results through descriptive statistics (mean) indicated there was a significant difference between the group which was taught through pictures series technique and process-based approach over control group. The researchers concluded that the intervention with picture series

technique improved the overall growth of writing skills, specific to the areas of transition or logical sequence and ideas exposure.

Jaatinen (2015)

Jaatinen's (2015) study titled "**Promoting Interculturalism in Primary School Children through the Development of Encountering Skills: A Case Study in Two Finnish Schools**" introduces diversity (educational, social and multicultural) of children as a resource in language teaching. The teaching experiment included two English teachers with a total of 105 children of their language classes that was part of a nationwide research and development project in Finland. It aimed at developing conceptions and practices of intercultural language education and transforming language curricula based on them. Supported by a university researcher, the teachers experimented, reflected on, evaluated and developed such pedagogic action-pedagogy of intercultural encounters-through which they could meet the challenges of diversity in their classrooms. Good practices in teaching intercultural encountering skills were developed and seen essential for promoting identity development in language learning. The teachers' reports on their progress in regular seminars were discussed, reflected on and theoretically analyzed. The teachers and researchers suggested justified improvements for language curricula.

Jung & Suzuki (2015)

Jung and Suzuki's research **(2015)** titled "**Scaffolding Strategies for Wiki-Based Collaboration: Action Research in a Multicultural Japanese Language Program''** attempted at using Wikis to encourage and support collaborative constructivist learning. They implemented scaffolding strategies to guide the students in their use. This action research investigated three scaffolding strategies for wiki-based multicultural Japanese language learning: worked examples, grouping and peer assessment. The findings of the study indicated that the use of a template explaining the learning objectives and expected learning process was more effective than detailed worked examples. It also concluded that heterogeneous grouping and internal and external peer review were important factors and that wiki-based collaborative learning can be culture laden and in conflict with traditional teaching and learning.

Lavoie, et al. (2014)

Lavoie, et al.'s **(2014)** study titled "**Indigenizing Vocabulary Teaching: An Example of Multiliteracies Pedagogy''** presents a community-based pedagogical initiative for teaching vocabulary. The study introduced a teaching method grounded in indigenous knowledge theory. It is an exploratory study and it used participatory action research methodology. The experiment involved thirty students who used the teaching method which was designed and validated by the community-based researcher. The results give insight on how to adapt French language teaching for indigenous communities. It also shed light on the benefits of including elders, parents, indigenous knowledge, observation, and storytelling for vocabulary teaching.

Rubrico & Hashim (2014)

Rubrico and Hashim's study (2014) titled "**Facebook-Photovoice Interface: Empowering Non-Native Pre-Service English Language Teachers''** investigated engaging non-native pre-service English teachers who are still learning the language themselves in two tasks: facilitating their language teaching skills and scaffolding their language learning. They used the action research which interfaced Facebook and Photovoice technologies in order to empower participants to be proactive in their language learning and teaching skills. They examined the participants' impressions regarding the interface's role in strategizing their language learning and teaching skills enhancement. Data collection for this study was the participants' mid- and post-semester feedback, reflection papers, and engagement matrix from the class Facebook page. Results suggest that the instructional design of blending technology (i.e. Facebook and Photovoice), pedagogy of empowerment, and collaboration was effective in empowering participants to take responsibility for their own learning, thereby improving their language learning and teaching skills.

Sela (2012)

Sela's thesis (2012) titled **''Action Research project on Computer–Supported Collaborative Learning in Teacher Education''** describes an ongoing action research project carried out by a teacher educator at a pre-service teacher education college using social learning in her teaching through the use of computer-supported collaborative learning methods and tools. The tools of the study consisted

of class feedback, college student satisfaction surveys, students' reflective writings, and content analysis of online cooperative interaction. The paper suggested an additional cycle in which an entire course will be offered through a Facebook page instead of the institutional learning management system.

The sample included 100 students. The researcher concluded that keeping up-to-date with technology and at the same time maintaining beliefs set a good example to students for coping with the complexities of teaching. Furthermore, the examination of both beliefs and practices is of utmost importance, and should continue throughout one's entire teaching career by engaging in lifelong learning: as action research.

Simpson (2011)

Simpson's (2011) study titled **''Using cooperative Learning during Graphic Design Classroom Critiques''** is an action research study on created and implemented a treatment called Design Structures to increase student participation during writing critiques and incorporated cooperative learning strategies during the treatment. The sample consisted of 36 first-year undergraduate students attending a required 11-week foundational design course. Data were collected by interviews, questionnaires and surveys. The results showed the quality of the experience levels were higher overall for students during cooperative learning and encouraged using cooperative methodology.

Kimhachandra (2010)

Kimhachandra's (2010) thesis investigated **''An Action Research project used to improve Students` Language learning performance and the researcher teaching practices by using CLT approach ''**and to evaluate the researcher efforts to improve his performance. The target group consisted of 30 of the seventh graders at Bamrug School.

The study was conducted in four cycles; action research cycles. The data was collected by teacher`s journal, interview, observation card and students` portfolio and they were analyzed by the coding technique of a qualitative method .The results were in favor of using the communicative approach to create a lively classroom atmosphere besides developing more positive attitudes on the part of the students.

Moreover, it assured the teacher`s role in adapting and adopting more teaching approaches to develop the target students` language competence in the future.

Ruso (2009)

Ruso's (2009) study titled **''An Action Research approach to apply Task-based Learning to a traditional classroom situation to find out solutions to certain problems such as poor learners` motivation''** investigated the learners' opinions of a sample of 54 EFL learners within two groups about TBL (Task-based learning) through different tools; a questionnaire, diaries and semi-structured interviews and a t-test to examine whether the difference between two sets of questions was statistically significant. The findings of the study revealed TBL enhanced students' learning and improves their language performance significantly and a TBL approach had an impact on the researcher's professional development too, thereby teachers are invited to reflect more on their practices and become reflective practitioners by reflecting on their professional experiences.

Sowa (2009)

Sowa's **(2009)** study titled **''Understanding our Learners and Developing Reflective Practice: Conducting Action Research with English Language Learners''** aimed at socializing teachers to the teaching of English language learners (ELLs) as well as helping these teachers develop reflective practice through implementing action research projects. Drawing on the surveys, action research projects conduced with ELLs and reflection papers as data, the study explored the teachers' statements about the impact of the course work and the projects on their teaching and their beliefs about teaching ELLs. Students indicated that they felt they had grown as teachers, were more reflective, and were more confident about teaching in general, and teaching ELLs in particular.

Marzouqi (2006)

Marzouqi's (2006) study titled **''The Use of Correction Codes in The Development of Students` Writing Skills''** is an action research project which investigated how providing feedback can affect students' writing in the form of correction codes. The researcher used questionnaires, observation and documents. The sample consisted of the eighth grade students who were chosen purposefully as

it was the level the teacher researcher was teaching. The findings of the study proved that students developed their writing skills and their confidence. Moreover, their self-esteem increased considerably. The researcher suggested more research be done to improve students` independent writing.

Obaid (2005)

Obaid's (2005) study titled **''The effect of teaching Vocabulary through the use of a teaching resource; vocabulary sacks''** focused on using vocabulary sacks full of characters and cards. Action research was used as a small scale intervention methodology. Tools of the study included an observation card, semi structured interviews with the students' parents, and a survey to test the vocabulary sacks influence on vocabulary learning and motivation. Analysis of the data suggested vocabulary sacks as a resource to teach vocabulary had an impact on young learners' vocabulary learning and acquisition, and therefore the researcher invited similar vocabulary strategies to be developed and applied.

Shakhaweti (2004)

Shakhaweti's **(2004)** study titled **''The Effectiveness of Total Physical Response as a Classroom Management Strategy''** tried to answer how children respond to TPT activities, what strategies can be used for managing children in the classroom when following TPR methods and how suitable TPR is for use with students in government schools in the UAE. The sample consisted of a five-student group of the fifth grade. The researcher used action research methodology. She used diaries, reflection notes, a questionnaire and interviews. The researcher concluded that TPR was a successful classroom management that teachers can easily implement in their lessons, or once they face a management problem. It can be used with other levels too. The study suggested such research could provide an introduction to some professional developmental sessions for teachers and mangers about the importance of TPR in the classroom.

2.3 Commentary on the previous studies

The researcher reviewed previous studies to further her knowledge about the effectiveness of action research in improving English language techniques as well as its impact on empowering teachers' professional development. This commentary will focus on the purposes, findings, place, population, samples, methodology, instruments, findings and recommendations.

a. The purposes of previous studies and their findings

The findings of the previous studies concluded that action research is highly effective either in improving English language teaching techniques or in serving as a catalyst for empowering teachers' competencies as well.

Studies concerning effectiveness of action research in improving teachers' professional development stressed that action research play a key role in developing teachers' autonomy and self-reliance in improving their competencies. Gungor's (2016) study asserted that providing the pre-service teachers with reflective tools to monitor, evaluate their teaching enhances their professional growth. Moreover, the findings of Naci's (2015) study indicated that the teachers were willing to embrace action research in their teaching profession as it would cultivate autonomy and assist their professionalism. Hine and Lavery's (2014) proved the influence of action research in facilitating teachers' growth and empowerment. Thus Shanks and Miller and Rosendale's **(**2012) study demonstrated the importance of action research as a viable mechanism to develop teachers' confidence and competencies. Moreover, Ahmadian and Tavakoli's (2011) thesis assured the leading role of action research in better improving teaching practices and invigorating teaching skills.

Tomas (2011) also asserted the role of action research in enhancing the teacher leadership and professional development. Brown (2002) reached the same conclusion that action research helps provide teachers with the necessary tools and provision for better teaching practices. Gore and Zeinchner's (1991) study called for giving more emphasis to action research and reflection in pre-service education due to their core role in teachers' development.

Concerning the second domain which deals with previous studies which examined the effectiveness of action research on improving teaching techniques, the results of the studies of Tang, et al. (2016), Trivino and Andrea (2016), Whankhom, et al. (2016), Gutiérrez, et. al. (2015), Jaatinen (2015), Jung and Suzuki(2015),

Lavoie, et al.'s (2014), Rubrico and Hashim (2014), Sela (2012), Simpson (2011), Kimhachandra (2010), Ruso (2009), Sowa (2009), Marzouqi (2006), Obaid (2005), and Shakhaweti (2004) all indicated that action research influenced their teaching techniques positively by providing them with deeper insights to make informed decisions.

b. Population and Sample

The previous studies were applied on pre-service teachers, in-service teachers, school and university students as follows:

- Previous studies whose subjects were pre-service teachers include those of Gungor's (2016), Tomas (2011), Shanks, et al.'s (2012), Tomas' (2011), Gore and Zeinchner's (1991), Rubrico and Hashim (2014), and Sela (2012).
- Previous studies whose subjects were in-service teachers are those of Naci (2015), Hine and Lavery (2014), Ahmadian and Tavakoli (2011) and Brown (2002).
- Previous studies whose subjects consisted of school or university students are those of Tang (2016), Trivino and Andrea (2016), Whankhom, et al (2016), Gutiérrez, et al. (2015), Jaatinen (2015), Jung and Suzuki (2015), Lavoie (2014), Simpson (2011), Kimhachandra's (2010), Ruso (2009), Sowa (2009), Obaid (2005), and Shakhaweti (2004).

Overall, the previous studies were applied on different samples, yet they all asserted that action research is influential in improving teaching techniques as well as enhancing professional development.

c. Place

The previous studies were administered in different countries. Gungor's study was applied in Turkey, Gore and Zeinchner's (1991) study was applied in the United States, Tang ,et al.'s (2016) study was applied in China, Trivino & Andrea's (2016) study was conducted in Colombia, Whankhom, et al.'s (2016) study was conducted at Sophomore**,** Gutiérrez, et. al.'s (2015) study was applied at Institución Educativa Simón Araujo, and Jaatinen's (2015) study was conducted in Finland.

The researcher presented some previous studies from the Arab world, such as those of Marzouqi (2006)**,** Obaid (2005) Shakhaweti (2004) which were applied in the United Arab Emirates.

To the researcher's best knowledge, there are no studies conducted in Gaza on the effectiveness of action research in improving English language teaching techniques.

d. Methodology

The methods which the previous studies conducted used varied. Some of them used the experimental approach such as those of Whankhom, et al. (2016)**,** Jaatinen (2015)**,** Jung and Suzuki (2015), Ruso (2009), Marzouqi (2006), Obaid (2005) and Shakhaweti (2004), while other**s** used the descriptive approach such as those of Hine and Lavery (2014), Shanks, et al. (2012)**,** Ahmadian and Tavakoli (2011), Tomas (2011), Brown (2002), Gore and Zeinchner (1991), Tang, et al. (2016) and Sowa (2009).

The inquiry-based method, action research was used in the studies of Gungor (2016), Trivino and Andrea (2016), Gutiérrez, et al. (2015), Jung and Suzuki (2015), Rubrico and Hashim (2014), Simpson (2011) and Kimhachandra (2010).

These reviewed studies made use of both the quantitative and qualitative methods. Therefore, the researcher used the mixed method approach.

e. Instruments

Reviewing the previous studies revealed that different tools were used to collect data to achieve the purposes of the studies. The tools included achievement tests, questionnaires, surveys, interviews, observation cards, recording sessions, portfolios, and artifacts. Some studies used one tool; however, others implemented two, three and sometimes four tools. Some studies required quantitative data, others qualitative, and certain studies combined both quantitative and qualitative data, especially in those which used action research methodology.

The tools used in the previous studies were as follows:

- **Previous studies using one tool:** Hine, Lavery (2014) used semi-structured interviews, Zeinchner (1991) used written reports, Trivino and Andrea (2016) used an achievement test, and Gutiérrez, et al. (2015) used a post-test.

- **Previous studies using two tools:** Gungor (2016) used video recording and reflective journals, whereas Naci's (2015) tools included a questionnaire and structured interviews.
- **Previous studies using three tools:** They include the studies of Brown (2002), Rubrico and Hashim (2014), Simpson (2011), Kimhachandra (2010), Sowa (2009), Marzouqi (2006), Obaid (2005), and Shakhaweti (2004) whose tools consisted of diaries, reflection notes, a questionnaire and interviews.
- **Previous studies using four tools:** these included the studies of Whankhom, et al. (2016), Sela (2012), and Ruso (2009).

In the light of the many tools administered and the data they render to the studies, the researcher decided to use five tools so as to collect required data for the current study. She used an achievement test, a questionnaire, an observation card (Action research checklist) for quantitative data, while diaries and focus group protocol were used for qualitative data.

Summary

Chapter Two reviewed theoretical background of action research-based program .Furthermore, it focused on related previous studies, commented on the purposes of previous studies and their findings, population and sample, place, and instruments. The researcher provided a commentary on how the previous studies deliberately informed her about the sound decision regarding the points discussed.
The next chapter will focus on methodology of the study and the statistical procedures used.

Chapter III
Methodology

Chapter III

Methodology

This chapter discusses the procedures followed to examine the effectiveness of an action research-based training program in improving teachers' teaching techniques of English language. It introduces a complete description of the methodology of the research, the population, the sample, the tools, the pilot study, the research design, and the statistical treatments of the research findings.

3.1 Type of Research Design:

The researcher used the mixed-method approach. It is a type of research where the researcher combines quantitative and qualitative research techniques, methods and concepts into a single study. It is a logic of inquiry that includes the use of induction (or discovery of patterns), deduction (testing of hypotheses), and abduction (uncovering and relying on the best of a set of explanations for understanding the results (Terrell, 2011). The use of mixed-method approach to study the same phenomenon does, in turn, give us corroboration; a superior evidence for the results and widen the scope of understanding of the topic of the current study.

The study also used multiple case study which provides multiple sources of evidence allowing triangulation of findings (Yin, 2009), which is a major strength of the case study design. It also offers the benefit of studying the phenomena in detail and in context especially when there are more variables of interest than there are observations, and it makes the research more accessible to wider readership than some other designs (Yin, 2009).

One group of 18 female English Language teachers was involved in an action research -training program which lasted for 12 hours and consisted of four sessions, each of which lasted for 3 hours a day.

3.2 Study Population

The research population consisted of all in-service female English language teachers who teach in governmental schools in the second semester of the academic year 2015-2016 at Middle Directorate of Education.

3.3 Study Sample

The sample of the study, as shown in Table (3.1) below, consisted of 18 female English language teachers group as a purposive sample to examine the impact of an action research-based-program on their teaching techniques and perspectives. The subjects of the study showed interest and strong desire to participate in the research so as to improve their teaching competencies.

Table (3.1) : One Group design

Group	Experimental
No. of sample	18

3.4 The Variables

The study investigated the following variables:

- The independent variable: The action research- training program.
- The dependent variables: (1) Teachers' knowledge background, (2) teachers' perspectives of their teaching techniques, and (3) the teachers' application of action research.

3.5 Instrumentation

Using the mixed-method approach, the current study needed varied tools to collect both quantitative and qualitative data. Therefore, the researcher used five different tools to achieve the aims of the study:

1- A pre-and post-test
2- An observation card
3- A questionnaire
4- Focus group
5- Diaries

While the researcher depended on the pre- and post-test, observation card and the questionnaire to collect quantitative data, the focus group and diaries were intended to provide qualitative data to allow deeper access to the phenomenon the current study examined.

3.5.1 Action research Achievement Pre-post-Test

To be able to measure the teachers' background knowledge of action research prior to and after their involvement in the action research-based program, the researcher prepared a pre-post-test (See Appendix 1).

a. The General Aims of the Test

Resting on the belief that teachers should possess sufficient and systematic background knowledge of action research, the researcher designed a pre-post-test. Consequently, the difference triggered would be attributed to the independent variable: training program. The test was used as a pretest before the training program and as a posttest soon after the training program finished.

b. The Sources of Constructing the Test

The training program was the main source of designing the test besides the researcher's experience as an English language supervisor as well as consultations with colleagues.

c. The Table of Specifications:

The researcher analyzed the content of the training program which was taught to the sample of 18 female English language teachers. Then, the table of specifications was drawn based on Bloom`s Taxonomy of Educational Objectives, which identifies six levels of the cognitive domain of learning (arranged from lower -order to higher -order thinking skills). The researcher was in favor of categorizing them as follows: Knowledge, Comprehension, Analysis, and HOTS (Higher Order Thinking Skills) (See Table (3.2).

Table (3.2) : Table of specifications

Level	No. of items	marks	%
Knowledge	8	8	21 %
Comprehension	8	8	21 %
Analysis	7	7	18.4 %
HOTS	15	15	39.6 %
Total	38	38	% 100

d. Items of the test:

The test consisted of 38 items and covered all the levels of Bloom's Taxonomy with a total score of 38 marks, where each item received one mark. The question types included the following:

1. Question 'A' consisted of 8 multiple choice items.
2. Question 'B' consisted of 8 re-arrange items in which the participants had to identify the phases of action research and then to put them in the correct order.
3. Question 'C', which consisted of 10 items, asked participants to tick whether the statements about action research are true or not.
4. Question 'D', which consisted of 7 items, asked participants to differentiate action research from other types of research.
5. Question 'E' had 5 fill-in-the-space items.

Table (3.3) below shows the distribution of the questions and items of the achievement test.

Table (3.3) : The Distribution of the Questions and Items of the Achievement Test

Question	Type	No. of items	Marks
Question 1	Choose the correct answer	10	10
Question 2	Number the action research steps	6	6
Question 3	Decide whether the following statements are true or false	7	7
Question 4	Decide on what is Action Research (AR) and what is not action research(NAR)	10	10
Question 5	Complete the following paragraph with words from the box	5	5
Total	**5**	**38**	**38**

Overall, the balance of the items and their levels guarded that the checked knowledge of action research depended on the action research-training program which the researcher applied.

3.5.1.1 **The pilot study**

The test was applied on a random sample of (18) female teachers from the Middle Directorate of Education, who have the same characteristics of the sample of the study. The results were recorded and statistically analyzed to assess the validity

and reliability of the test as well as the time needed. The items of the test were modified in the light of the statistical results.

-Time Estimation

After applying the test on the pilot study, the researcher estimated the time needed for the test according to the following formula:

$$\frac{\text{Time of first student to finish the test + time of the last student to finish the test}}{2}$$

$$\frac{80 + 40}{2} = 120$$

Accordingly, the time of the test was (60) minutes.

3.5.1.2 **The validity of the test**

Mackey and Gass (2005: 107) state "Validity refers to the representativeness of our measurement regarding the phenomenon about which we want information." In other words, a test should measure what is intended to be measured. The researcher used the referee validity and the internal consistency validity.

3.5.1.3 **The referee validity**

The test was referred to a jury of specialists in English language and methodology in Gaza universities, supervisors in schools and experienced teachers. The items of the test were modified according to their recommendations.

3.5.1.4 **The internal consistency validity**

Al Agha (1996, p.121) states that the internal consistency validity indicates the correlation of the degree of each item with the total average of the domain. It also indicates the correlation of the average of each domain with the test total average. This validity was calculated by using Pearson Formula.

According to Table (3.4), the correlation coefficient of each item score with the total score of level of Bloom's taxonomy is significant at levels (0.01) and (0.05). The correlation coefficients ranged between (0.511 – 0.978). Therefore, it can be concluded that the test was highly consistent and valid as a tool to collect data relevant to the study.

Table (3.4) : Correlation coefficients of each item score with the total score of the level of Bloom's Taxonomy

Level	Item No	Pearson Correlation	Level	Item No	Pearson Correlation	Level	Item No	Pearson Correlation
Knowledge	1	0.526**	Analysis	1	0.902**	HOTs	1	0.752**
	2	0.932**		2	0.570**		2	0.796**
	3	0.649**		3	0.846**		3	0.811**
	4	0.824**		4	0.732**		4	0.574**
	5	0.606**		5	0.863**		5	0.918**
	6	0.771**		6	0.965**		6	0.734**
	7	0.811**		7	0.811**		7	0.816**
	8	0.851**					8	0.520**
Comprehension	1	0.511**					9	0.978**
	2	0.898**					10	0.831**
	3	0.538**					11	0.573**
	4	0.701**					12	0.699**
	5	0.787**					13	0.878**
	6	0.737**					14	0.831**
	7	0.652**					15	0.776**
	8	0.874**						

r table value at df (16) and sig. level (0.01) = 0.561

Table (3.5) outlines the correlation coefficient of each level of Bloom's taxonomy with the total score of the achievement test.

Table (3.5) : The Correlation Coefficient of Each Level of Bloom's taxonomy with the Total Score of the Test

Levels	Total scores	Sig. level
Knowledge	0.602**	sig. at 0.01
Comprehension	0.654**	sig. at 0.01
Analysis	0.689**	sig. at 0.01
HOTs	0.671**	sig. at 0.01

r table value at df. (16) and sig. level (0.01) = 0.561

The correlation coefficient of each level of Bloom's taxonomy with the total degree of the test ranged between (0.602 - 0.689) and is significant at (0.01). Therefore, it can be concluded that the test was highly valid.

3.5.1.5 **Reliability of the test:**

Mackey and Gass (2005, p.128) refer to reliability as instrument consistency. That is a person is expected to get the same score on two administrations of the same test if applied in similar conditions. The reliability of the test was measured by the Spilt-half (Spearman-Brown Formula) and Kuder-Richardson (K-R20) Technique.

3.5.1.5.1 Split half Method:

Split half Method relies on splitting the test into two equal parts and calculating the correlation coefficient between the even and the odd items of the test as shown in Table (3.6) below.

Table (3.6) : Spearman-Brown Correlation for equal parts (even X odd)

SPILT –HALF TECHNIQUE			
Level	**TOTAL**	**Correlation coefficient**	**Reliability**
Knowledge	8	0.885	0.939
Comprehension	*7	0.900	0.906
Analysis	8	0.768	0.869
HOTs	*15	0.964	0.965
Test	38	0.890	0.942

* The researcher used Guttman coefficient for unequal halves.

Table (3.6) shows that the test proved to be reliable. The Spilt- half coefficient of the test is (0.942), which is above (0.7), which indicates that the test is reliable to be used in the study.

3.5.1.5.2 Kuder-Richardson (K-R20)

K-R20 depends on calculating the percentages of correct answers of the test items as well as the variance of every item. O'dah (2002, p.176) assures that if the coefficients of reliability shown exceed (0.70), they become acceptable. As shown in Table (3.7), **K_R20** coefficient is (0.869) which assures that the test is reliable to be applied in the study.

Table (3.7) : (K_R20) Coefficients of the Questions of the Test

Kud-Richardson (K-R20)		
Level	**Total**	(K_R20) coefficient
Knowledge	8	0.887
Comprehension	7	0.914
Analysis	8	0.859
HOTs	15	0.950
Test	38	0.869

3.5.1.6 **Scoring of the Test**

The questions of the test are objective type and only one answer is considered correct. Each correct item is given one point. The total score of the test is 38 points.

3.5.1.7 **Analysis of the items of the achievement test**

3.5.1.7.1 Difficulty Coefficient:

Difficulty Coefficient means the percentage of the failing students to the total students who took the test. It can be calculated by using the following equation:

$$\textbf{Difficulty Coefficient} = \frac{\textbf{No. of students with incorrect answers}}{\textbf{Total students who took the test}}$$

Table (3.8) shows the difficulty coefficient for each item of the test:

Table (3.8) : Difficulty coefficient for each items of the test

No.	Difficulty coefficient	No.	Difficulty coefficient
1	0.50	20	0.39
2	0.56	21	0.72
3	0.72	22	0.50
4	0.61	23	0.50
5	0.56	24	0.67
6	0.50	25	0.39
7	0.72	26	0.61
8	0.50	27	0.56
9	0.39	28	0.72
10	0.72	29	0.61
11	0.50	30	0.61
12	0.44	31	0.50
13	0.50	32	0.39
14	0.50	33	0.61
15	0.56	34	0.39
16	0.39	35	0.44
17	0.56	36	0.44
18	0.72	37	0.39
19	0.72	38	0.44
Total difficulty coefficient		0.54	

Table (3.8) shows that the difficulty coefficient wobbled between (0.39 – 0.72) with a total average of (0.54), which means each item was acceptable or within

the normal limit of difficulty according to the viewpoint of assessment and evaluation specialists.

3.5.1.7.2 Discrimination coefficient:

Discrimination Coefficient refers to the test ability to differentiate between the high achieving students and the low achieving students.

$$\textbf{Discrimination Coefficient} = \frac{\text{No. of correct answers among high achievers}}{\text{No. of high achievers}} - \frac{\text{No. of correct answers among low achievers}}{\text{No. of high achievers}}$$

Table (3.9) shows the discrimination coefficient for each item of the test:

Table (3.9) : Discrimination coefficient for each item of the test

No.	**Discrimination coefficient**	No.	**Discrimination coefficient**
1	0.33	20	0.33
2	0.67	21	0.33
3	0.33	22	0.33
4	0.56	23	0.56
5	0.44	24	0.44
6	0.33	25	0.33
7	0.33	26	0.33
8	0.33	27	0.44
9	0.33	28	0.56
10	0.33	29	0.56
11	0.33	30	0.33
12	0.44	31	0.56
13	0.33	32	0.33
14	0.33	33	0.56
15	0.44	34	0.56
16	0.33	35	0.44
17	0.44	36	0.44
18	0.56	37	0.33
19	0.33	38	0.67
Total discrimination coefficient			0.42

Table (3.9) shows that the discrimination coefficient wobbled between (0.33 – 0.67) with total average (0.42), which indicates each item was acceptable or in the normal limit of discrimination according to the viewpoint of assessment and evaluation specialists.

3.5.2 The Questionnaire

The questionnaire was used in this study to get data to help the researcher measure the effectiveness of an action research-based training program in improving in-service teachers` techniques in teaching English language.

3.5.2.1 **The aim of the questionnaire**

The questionnaire was conducted to measure English language teachers' perspectives of their teaching techniques of language skills and areas prior to and after the training program.

3.5.2.2 **Steps of constructing the questionnaire**

1. The researcher reviewed relevant literature discussing questionnaires and their effectiveness in measuring perspectives.
2. In view of the related literature, the researcher decided on the main points which the questionnaire was going to focus on ,and these points were divided into four domains.
3. The researcher consulted specialists in methodology for the construction of the questionnaire and the items included.
4. The questionnaire was referred to university professors and experts to be refereed. (See Appendix, 2).

3.5.2.3 **Description of the Questionnaire:**

The questionnaire was divided into four domains which were respectively: Teachers as researchers, the Nature of Action Research, Data Collection in Action Research, and Limitations of Action Research.

The researcher used the five-point Likert scale to measure the teachers' responses. The Levels of the questionnaire responses were strongly agree, agree, no opinion, disagree and strongly disagree.

After being refereed by the experts, the questionnaire was modified to four domains. The final version consisted of 33 items as shown in table (3.10).

Table (3.10) : The questionnaire Domains

Domain	No. of items	Percentage
1-Teachers as researchers	12	0.37 %
2-the Nature of Action Research	9	0.27 %
3-Data Collection in Action Research	6	0.18 %
4-Limitations of Action Research	6	0.18 %
Total	33	100 %

3.5.2.4 **Instructions of the questionnaire**

The researcher explained the titles of the domains which the questionnaire consisted of. The respondents were asked to read carefully and tick the responses in the correct place in the 5-point Likert scale.

3.5.2.5 **The questionnaire validity**

The questionnaire validity requires that it should measure what it is designed to measure. The study used the referee validity and the internal consistency validity.

3.5.2.5.1 The referee validity

The test was introduced to a jury of specialists in English language and methodology in Gaza universities, Ministry of Education, supervisors and experienced teachers in government and UNRWA schools. The items of the test were modified according to their recommendations (See Appendix 6).

3.5.2.5.2 The internal consistency validity

The internal consistency validity aims to check the correlation of the score of each item with the total average of the domain using Pearson Formula shown in Table (3.11) below.

Table (3.11) : correlation coefficients of the score of each item with the total average of the domain

Level	Item No	Pearson Correlation	Level	Item No	Pearson Correlation	Level	Item No	Pearson Correlation
TEACHERS AS RESEARCHERS	1	0.756**	THE NATURE OF ACTION RESEARCH	1	0.839**	LIMITATONS OF ACTION RESEARCH	1	0.639**
	2	0.864**		2	0.709**		2	0.916**
	3	0.940**		3	0.917**		3	0.504*
	4	0.935**		4	0.684**		4	0.670**
	5	0.930**		5	0.773**		5	0.453*
	6	0.883**		6	0.891**		6	0.860**
	7	0.830**		7	0.442*			
	8	0.962**		8	0.883**			
	9	0.819**		9	0.872**			
	10	0.816**	DATA COLLECTION IN (AR)	1	0.842**			
	11	0.824**		2	0.967**			
	12	0.666**		3	0.867**			
				4	0.863**			
				5	0.936**			
				6	0.785**			

r table value at df (16) and sig. level (0.05) = 0.444

r table value at df (16) and sig. level (0.01) = 0.561

As it can be seen in Table (3.11), the coefficient correlation of each item with the total score of the domain was significant at levels (0.01), and ranged between (0.442) and (0.967). Therefore, it can be concluded that the test is highly consistent and valid.

The researcher also tested the correlation between the four domains and the total degree of the questionnaire ranged between (0.508) and (0. 907), as shown in table (3.12) and the results assured the high internal consistency of the questionnaire.

Table (3.12) : Pearson correlation coefficient of every questionnaire domain with the total degree of the questionnaire

Domain	SUM	**Sig. level**
Teachers as researchers	0.907**	sig. at 0.01
The nature of action research	0.870**	sig. at 0.01
Data collection in action research	0.743**	sig. at 0.01
Limitations of action research	0.508**	sig. at 0.01

r table value at df (16) and sig. level (0.01) = 0.561

3.5.2.5.3 Questionnaire Reliability:

The reliability of the questionnaire was measured by Alpha Cronbach technique and the Spilt- half techniques, whose measurements are tabulated in Tables (3.13) and (3.14).

Table (3.13) : Alpha Correlation Coefficient of the reliability of the questionnaire

Domain	Number of Items	Alpha Cronbach
1. Teachers as researchers	12	0.967
2. The nature of action research	9	0.916
3. Data collection in action research	6	0.939
4. limitations of action research	6	0.761
Total	**33**	**0.949**

The results illustrated in Table (3.13) show that the total correlation coefficient of the questionnaire was (0.949) which implied that the questionnaire was suitable for conducting the study.

Table (3.14) : Spilt –half Method

Domain	No. of items	Correlation between two parts	Reliability
1. Teachers as researchers	12	0.946	0.972
2. The nature of action research	*9	-	0.928
3. Data collection in action research	6	0.796	0.886
4. Limitations of action research	6	0.694	0.819
Total	***33**	**-**	**0.813**

* The researchers used Guttman coefficient for unequal halves.

Table (3.14) shows that the reliability coefficient by using split- half technique after modification is more than (0.813), which indicates the questionnaire was reliable to be used as a tool in the study.

3.5.3 The observation card

The observation card was used to determine whether there would be any improvement in teachers' application of action research prior to and after the training program.

3.5.3.1 **The Aim of the Observation Card**

The observation card was employed as a tool in the current study to observe the action research projects carried out by the participants of the study to measure the improvement that occurred in their teaching techniques.

3.5.3.2 **Steps of constructing the observation card**

- Related literature on constructing observation cards was reviewed.
- The items and domains were written and referred to specialists for consultation.
- The observation card was modified in view of the referees' recommendation.
- The final copy of the observation card was modified to six domains instead of five.

3.5.3.3 **The description of the observation card**

The observation card consisted of six domains, involving twenty-two items as shown in Table (3.15). The domains were as follows:

- The focus
- The Rationale
- Actions
- Questions
- Data Collection
- Action Research Meeting Agenda (Focus Group)

Table (3.15) : The domains of the observation card

Domains	No. of items
Focus	4
Rationale	3
Actions	2
Questions	6
Data collection techniques	3
Action research meeting agenda (focus group)	4
Total	22

The observation card was graded from 1-5. The observer, the researcher, ticked (√) the action observeded during the observation period.

3.5.3.4 **The validity of the observation card**

In order to measure the validity of the observation card, the researcher used the referee validity. The observation card was introduced to experienced supervisors (See Appendix 3). The items of the observation card were modified according to

their recommendations. In addition, the researcher calculated the coefficient correlation of each item within its domain as shown in Table (3.16).

Table (3.16) : Pearson Correlation coefficient for each item with its domain

Domain	Item No	Pearson Correlation	Domain	Item No	Pearson Correlation	Domain	Item No	Pearson Correlation
Focus	1	0.939**	Actions	1	0.881**	Data collection techniques	1	0.833**
	2	0.859**		2	0.930**		2	0.901**
	3	0.864**	Questions	1	0.769**		3	0.868**
	4	0.692**		2	0.843**	Action meeting agenda (focus group)	1	0.913**
Rationale	1	0.859**		3	0.777**		2	0.928**
	2	0.822**		4	0.338**		3	0.769**
	3	0.857**		5	0.784**		4	0.868**
				6	0.832**			

r table value at df (16) and sig. level (0.01) = 0.561

Table (3.16) shows that observation card items were significant at levels ($\alpha \leq 0.01$)

Table (3.17) shows the correlation coefficient of each domain with the total score of the observation card.

Table (3.17) : Pearson Correlation coefficient of each domain of the observation card with the total score

Domain	Pearson Correlation	Sig.
Focus	0.889**	sig. at 0.01
Rationale	0.901**	sig. at 0.01
Actions	0.925**	sig. at 0.01
Questions	0.929**	sig. at 0.01
Data collection techniques	0.938**	sig. at 0.01
Action research meeting agenda (focus group)	0.957**	sig. at 0.01

r table value at df (16) and sig. level (0.01) = 0.561

Table (3.18) demonstrates that there is a strong correlation between the domains and the total score, and the correlation coefficients ranged between (0.889) and (0.957), which ensures the high internal consistency of the observation card.

3.5.3.5 **The reliability of the observation card**

3.5.3.5.1 Cooper's Coefficient of Agreement

To test the reliability of the observation card, the researcher used Cooper Formula of observation where the researcher and another experienced English language teacher observed 5 participants. Each observer observed the participants of the study independently using the same scale to record the application of action research during the observation period. Therefore, inter-observer reliability was measured by using the following Cooper formula.

$$\text{Coefficient of agreement} = \frac{\text{points of agreement}}{\text{Points of agreement} + \text{points of disagreement}}$$

Accordingly, the researcher and the experienced English teacher observed five teachers' sessions of performance, Table (3.18)

Table (3.18) : Inter-observer reliability

Group	Total	First observer	Second observer	Reliability coefficient
Teacher 1	110	91	88	0.967
Teacher 2	110	76	72	0.947
Teacher 3	110	92	80	0.870
Teacher 4	110	88	83	0.943
Teacher 5	110	105	98	0.933
Total reliability of inter-observer				0.932

According to Table (3.18), the researcher found that the highest percentage of agreement between the observers was (96.7), while the lowest agreement was (87.0) and the total reliability was (93.2), which indicates a high level of inter-observer reliability.

3.5.3.5.2 Alpha Cronbach

The reliability of the observation card was tested by Alpha Cronbach, which is (0.960) as shown in Table (3.19).

Table (3.19) : Alpha Cronbach Method

DOMAIN	TOTAL	Alpha Cronbach
Focus	4	0.847
Rationale	3	0.801
Actions	2	0.769
Questions	6	0.753
Data collection techniques	3	0.823
Action meeting agenda (focus group)	4	0.892
Total	22	0.960

In Table (3.20), the Split-Half technique examined the reliability coefficient of the observation card, and recorded that the total was (0.951).

Table (3.20) : The reliability coefficient of the observation card

Domain	Total	Correlation coefficient	Reliability
Focus	4	0.738	0.849
Rationale	*3	0.731	0.810
Actions	2	0.645	0.785
Questions	6	0.454	0.625
Data collection techniques	*3	0.712	0.859
Action meeting agenda (focus group)	4	0.765	0.867
Total	22	0.906	0.951

* The researchers used Guttmann coefficient for unequal halves.

Evidently, both techniques demonstrated the high reliability of the observation card.

3.5.4 The Focus Group

3.5.4.1 **Description of the focus group**

A focus group can be defined as a small gathering of individuals who have a common interest of characteristics, assembled by the moderator who uses the group and its interaction as a way to gain information about a particular issue (Kruger & Casey, 2000). The purpose of the focus group is to promote a comfortable atmosphere of disclosure in which people can share their ideas, experiences, and attitudes about a topic.

The focus group protocol of this study consisted of 10 main questions, some of which have sub-questions too. The questions provide insight on the teachers' reasons for applying action research in their classrooms and how it affected their teaching techniques. The protocol sought deeper understanding of action research to help the researcher determine to what extent action research impacted the participants' teaching techniques.

3.5.4.2 **The aim of the focus group**

To achieve the study objectives, the researcher prepared a focus group protocol to enable the study participants to reflect on their action research experience, derive their own theories out of their practice and exchange ideas concerning the effectiveness of their intervention plans . Once a week and during

their meetings, the participants of the study raised issues, problems, challenges and successful points about the application of action research –based program to improve their teaching techniques.

3.5.4.3 **Construction of the focus group protocol**

After reviewing the related literature on focus group and seeing samples of similar ones, the researcher prepared the meeting agenda sheet. The protocol was referred to specialists of methodology for evaluation and recommendations, and they were required to judge the following points:

- The Protocol Suitability
- Relevance
- Language Correctness
- The importance of each question.

Modifications were made in accordance with the referees' recommendations.

3.5.4.4 **The focus group validity**

3.5.4.4.1 The referee validity

Much effort and time are needed to guarantee the results of the study are valid. The tools should represent our measurement regarding the phenomenon about which we want information, (Mackey & Gass, 2005). To verify that the focus group reflects what we believe it reflects , it was judged by a jury of specialists who modified and edited some of the questions and the final copy took their recommendations into account (See Appendix 4).

3.5.4.4.2 Instructions to the focus group

Ten to fifteen participants of the sample took part in the regular meetings to discuss the progress of their own action research programs. The meetings were facilitated by the researcher whose goal was to keep the discussion targeted on specific topics .She used a stimulus for discussion, e.g. a video or new strategies shown on the LCD. The focus group meetings helped provide the subjects with clearer answers to their concerns. Later, data was collected and documented, and ideas and suggestions were put forward to be applied and shared by the other participants. Moreover, challenges were considered and further alternatives were recommended.

3.5.5 Diaries

3.5.5.1 **The description of diaries**

Diaries are introspective methods often used to gather data for qualitative studies. The data collected by diaries furthered the researcher's knowledge and scope on the phenomenon studied. Diaries also referred to as journals or autobiographies, can be used to allow teachers to write about their language learning and teaching experiences without the constraints imposed by specific questions, (Mackey & Gass, 2005).

3.5.5.2 **The aim of diaries**

Participants were required to report their thoughts, impressions and insights in certain grids provided by the researcher. Such data yielded insights into the language teaching process that may be inaccessible from the researcher' perspective alone (Mackey & Gass, 2005).

3.5.5.3 **The construction of diaries**

Action research diaries and related literature were reviewed to construct appropriate diaries to help yield more data on the effectiveness of action research. The researcher decided on a number of themes to be covered in the diaries sheet in accordance with the nature of the training program. Eight questions were listed at the beginning. Yet the specialists the diaries were referred to recommended only six questions were thorough and would provide detailed account of their thoughts about their action research projects.

3.5.5.4 **The validity of diaries**

The diaries sheet was prepared and then the researcher consulted specialists ~~of~~ in methodology to help decide on the following points:

1- The clarity of the items.
2- The suitability of the diary and its sufficiency to document an action research plan.
3- The deletion or addition of items.

The sheet was modified accordingly.

3.6 Study procedures

While conducting this study, the researcher followed the succeeding procedures:

1. The researcher reviewed related literature and previous studies pertinent to action research and its role in fostering teachers' professionalism and honing their competencies.
2. The tools of the study were designed and introduced to a jury of specialists in methodology and education including university professors, English language supervisors and experienced teachers to verify the validity and reliability of the tools.
3. The researcher executed the action research-based training program, held a 12-hour workshop for 18- female in-service English language teachers to train them on using action-research to improve their techniques of teaching language skills and areas, and help them deal systematically with any problems they may encounter while teaching English.
4. By the end of the workshops, the participants proposed action research-based projects on one of the language skills or areas to be applied in their classes.
5. A multiple case study was conducted on the chosen sample.
6. A pre-test and pre-questionnaire were administered.
7. A focus group met regularly to exchange ideas and share experiences and issues about the application of their projects pertaining the focus group questions in focus.
8. An observation card was used to observe the participants' application of action research to find out whether there was a difference in their application of their action research projects in the classroom prior to and after their involvement in the training program.
9. The posttest and the post questionnaire were applied 3 weeks after the end of the action research-based training program.
10. Teachers were prompted to write their reflections about the experience in the diaries they kept throughout the implementation of their action research plans.
11. Data collected through the varied study tools were gathered and analyzed to reach conclusions and check the verification of the hypotheses of the study.

12. Some suggestions and recommendations were put forward in the light of the study findings.

3.7 Statistical Analysis Procedures

After the data had been collected, they were computed by using the following techniques and tests included in the Statistical Package of Social Science (SPSS):

1. "Guttmann Correlation": To determine the internal consistency validity of the observation sheet items and the evaluation criteria of the test.
2. "Alpha Cronbach Technique": To measure the reliability of the observation sheet items.
3. "Split-half Technique": To test the reliability of the test, questionnaire ,and the observation card.
4. "Wilcoxon Signed Ranks Test".
5. "Effect Size Level" by using "Z" value and "Eta Square": To check the extent of the impact size of the evident significant differences within the experimental group (Pre and Post).

Summary

Chapter Three shed light on the methodology of the study and instruments. It discussed the methodology of the research, the population, the sample, the tools, the pilot study, the research design, the statistical treatments, and the procedures of the action research-based training program. The next chapter will present the findings of the study.

Chapter IV
Results: Data Analysis

Chapter IV

Results: Data Analysis

This study aimed at examining the effectiveness of an action research-based program in improving in-service teachers` English language teaching techniques. This chapter outlines the study results obtained from analyzing the data collected while using the study five tools in order to answer the research questions and examine its hypotheses. The statistical analysis of the collected data was processed by using different statistical formulae and tests of the Statistical Package for Social Science (SPSS). Diagnostic analysis and Wilcoxon Signed Ranks Test were used to measure the differences prior to and after the implementation of the action research-training program. To measure the effect size of the independent variable, training program, the researcher used ($\eta^{2)}$. The results indicated the large effect of the program.

4.1 Answer to the study first question

In her attempt to answer the first study question which was formulated as follows: What is the nature of the action-research-based program intended to improve in-service teachers` techniques in teaching English language?, the researcher reviewed related literature and previous studies to formulate a thorough grasp of the nature of action research-based programs. The training program aimed at involving teachers in investigating and evaluating their own teaching and enabling them to take informed, committed and intentional actions. It also provided them with necessary theoretical background of action research. Following are more details about this action research-based training program.

In the training program, teachers were divided into four groups. Each group received 12 hours of training, a 3-hour session a day. In the first session, English language teachers were provided with some theoretical background about the nature of action research and the steps that they were to follow to implement their individual action research projects. Moreover, the trainer, the researcher, discussed models of the action research process.

During training sessions, the trainer and the English language teachers raised some of their problems and the methods or the steps that they might use to identify the questions they were interested in investigating. By the end of the first training

session, it was expected that teachers were ready to go back to teaching their classes and experiment with different teaching strategies and methods they wanted to explore, and to document their progress.

Future group meetings, referred to here as focus group, were held once a week and involved discussions of what the teachers had tried. Thus, the various research issues that were arising for them were fully discussed. Numerous suggestions were proposed during the focus group discussions, whether related to their own research or to that of their colleagues. The focus group was a collaborative process involving ten to fifteen teachers meeting together with a facilitator- the researcher- to engage in a critical discussion and reflection on issues pertaining to action research projects. The facilitator's role was to foster teachers' practices and encourage them.

In these focus group meetings, teachers brainstormed the challenges related to the application of some new methods or strategies, made recommendations of actions, evaluated some practices, furthered their understanding of some of the topics discussed, gave and received reflective feedback, asked for alternative strategies, and then followed up and discussed next steps.

Danielson and McGreal (2000, p.24) claim that "Teaching is highly complex, and most teachers have scant opportunity to explore common problems and possible solutions, or share new pedagogical approaches with their colleagues". Action research based-programs aimed to tackle this by enabling teachers with various opportunities to do so.

In the first training session, the researcher demanded that participants, divided into four groups, think of a successful or unsuccessful teaching situation they encountered, and how they managed to overcome and/or improve it. Then, the groups nominated a participant whose teaching situation was unique or exceptional. After nomination, the participants took part in a plenary which aimed to elicit procedures used to address the problem encountered, and help the participants share ideas and perceptions regarding those techniques and procedures.

After the participants had reported their intervention plans, and some comments, opinions, suggestions etc. the participants wrote them on a sheet to be used for comparison with the steps of action research later. The researcher displayed the cycle of action research and its different steps on an LCD so that they could come to a real and better understanding of these steps.

The first step of action research was problem identification where participants were required to specify their problems clearly and concisely, and prioritize the difficulties they needed to address.

The second step was to formulate the research question in order to identify the appropriate strategies and methods to achieve the desired goals or results. Forming the research question or questions was very important to work out the puzzles of practice. The researcher supported the teachers at this stage by providing them with some articles and websites to enrich their understanding about the puzzling issues addressed. The participants were also asked to consult their head teachers, experts, colleagues, and watch some educational YouTube videos, etc.

In the third step, teachers were expected to collect data through various methods, at two separate stages. The first stage was at the beginning of their project and the data here were to specify the problem their project was tackling. The second stage was administered after the implementation of their action plan and was used to evaluate the success of their projects. Triangulation of data was essential so as to provide evidence of the problem addressed. Tools of data collection varied; classroom observation, diaries, video and audio tapes, interviews, focus group, field notes, students' and teachers' artifacts, homework and test scores.

In the fourth step, data were analyzed where teachers were asked to look for evidence over the period of their action research. To foster reflection which constitutes a core element in action research, teachers' were asked to write their reflections and reviews in the diaries. The analysis of the data collected would also help teachers realize the importance of deep reflection through action research and the importance of trying to understand more deeply their teaching practices.

In the fifth step, teachers were to discuss their findings to other teachers through focus group meetings so as to motivate other colleagues.

In the sixth step, teachers had to monitor change, analyze and evaluate in order to identify their follow up actions, and to look for other methods to solve classroom problems.

In summary, teachers were required to identify and define the problem, to frame their questions, to review some related literature, collect data, analyze data, answer the research questions, draw conclusions and follow up with the spiral nature of action research. The cyclical steps of ongoing reflection in this research were

related to Schon's reflection on action (1983, p.68) "What did I do and how can I do it better?" in order to make informed decisions.

The 12-hour action research training program yielded some empirical experience of action research, which in turn was the backcloth for more reflection during the more theoretical activities. The tools of the study such as the focus group and the diaries helped the teachers articulate their ideas, experiences, and opinions. Furthermore, the program allowed the participants to discuss, reflect on their teaching experiences and get involved in carefully designed task-based activities. Furthermore, it helped teachers understand the approaches and methods underpinning their teaching. Also it enhanced teachers to manipulate new learning activities and promote their self-reliance in defining, analyzing, and devising new strategies in handling their own major teaching problems in their situations.

4.2 Answer to the study second question

To answer the second question which was formulated as follows: Which English language skills and areas are intended to be enhanced by in-service teachers' improved teaching techniques acquired through the action research-based training program?", the participants had to decide on which language skills and area they wished to improve their teaching techniques in depending on their own classroom realities. Language skills included speaking, listening, reading, and writing, while the language areas included vocabulary, grammar, pronunciation, and functions.

Some of the action- research projects conducted focused on the following:

- Speaking .
- Reading Comprehension .
- Writing a short paragraph.
- Vocabulary Retention for 11^{th} graders.
- Writing the alphabet-1^{st} -2^{nd} Graders.
- Engaging 11^{th} &12^{th} graders in literature sessions.
- Spelling for 4^{th} graders.
- Grammar for 10^{th} graders.

The teachers experimented with many strategies and techniques to improve their current teaching techniques. The procedures used were adapted and modified in the light of the meetings of the focus group.

Having examined the qualitative data gathered in this study, the researcher had access to how the teachers identified the problems they were going to investigate. One of the participant teachers wrote, "I couldn't stand the students' being passive during literature classes. It's just disappointing and unpleasing." Another teacher decided to intervene to assist students in reading. She noted, "Students used to being taught by Grammar Translation method, which is unacceptable to me. I know there should be a way to train them to skim and scan without using their mother language."

Using technology to support students in learning grammar was one of the project of one participant who claimed, "Students spend hours chatting and facebooking others. Why not employ this attractive technological invention to enhance some of the grammatical issues through short quizzes and posts?"

In conclusion, the careful readership of the diaries and the focus group notes besides discussions has acquainted the researcher with the methods by which the participants prioritized their problems. Obviously when teachers act as researchers, then research projects become part of their own work (Bogdan & Biklen, 2007), and a tool to solve identified problems in their classrooms.

4.3 Answer to the study third question

To answer the third question which was formulated as follows: Are there statistically significant differences at $\alpha \leq 0.05$ between mean scores between the teachers' background knowledge of action research-based programs prior to and after their involvement in the training program?, the researcher tested the first null hypothesis which was stated as follows: "There are no statistically significant differences at ($\alpha \leq 0.05$) between the mean scores of teachers' background knowledge of action research-based programs prior to and after their involvement in the training program.

To compare the score of the effect of the program prior to and after its implementation, the researcher used Wilcoxon Signed Ranks Test as outlined in table (4.1).

Table (4.1): Wilcoxon Signed Ranks Test of the results of differences between the experimental group's score in all domains and total degree of the pre- and post-test

Domains	Ranks	N	Mean Rank	Sum of Ranks	Z	Sig. Value	Sig. Level
Analysis	Negative Ranks	1	3.000	3.000	3.0001	0.003	sig. at 0.01
	Positive Ranks	12	7.333	88.000			
	Ties	5					
HOTs	Negative Ranks	3	6.167	18.500	2.768	0.006	sig. at 0.01
	Positive Ranks	14	9.607	134.500			
	Ties	1					
Total	Negative Ranks	2	4.750	9.500	3.030	0.002	sig. at 0.01
	Positive Ranks	14	9.036	126.500			
	Ties	2					

"Z" table value at (0.05) sig. level equal 1.96
"Z" table value at (0.01) sig. level equal 2.58

Table (4.1) shows that (z) computed value at (0.05) and (0.01) which were respectively (3.001), and (2.768) were larger than the tabulated values which were,(1.96), and (2.58). This indicated statistical significant differences between pre- and post-test in Analysis and HOTs domains and the total degree of the test in favor of the post-test .The results demonstrated that the program was influential in enhancing teachers' background knowledge of action research mainly in the domains of Analysis and HOTs. Consequently, the null hypothesis is rejected for these domains.

The same results were affirmed by calculating the effect size where the researcher used "η2" effect size by using the following equation, (Afana, 2000, p. 42):

$$\eta^2 = \frac{Z^2}{Z^2 + 4}$$

Table (4.2) : The level of size effect.

Test	Effect Size		
	Small	**Medium**	**Large**
	0.01	**0.06**	**0.14**

Table (4.2) outlines the level of the size effect.
The size effect was calculated and the results of this equation are outlined in table (4.3) below.

Table (4.3) : "Z" value, Eta square "η^2 ", for each domain and the total degree

Domain	Z	Z^2	Z^2+4	η^2	Effect Size
Analysis	3.001	9.009	13.009	0.693	Large
HOTs	2.768	7.661	11.661	0.657	Large
Total	3.030	9.181	13.181	0.697	Large

Table (4.3) shows that there is a large effect size for Analysis and HOTs domains and the total score of the test. To conclude, the total effect size (0.697) indicated the program was largely effective.

The qualitative data collected using the diaries and the focus group revealed that the training program helped the teachers become more conscious of their practices. One of the participants claimed. "I might have heard of action research ,but this is the first time I'm beginning to study my teaching problems, study the causes, and work more systematically to achieve better results." Still, another participant expressed

> I couldn't believe that I was doing action research all my teaching years. I used to reflect on my practices , work out solutions, act, then reflect again to modify and attain better results without perceiving it was action research. However, the training program enabled me to focus more on data collection and documenting my practices for future reference.

A number of teachers emphasized their interest in the practical aspects of action research rather than memorizing, what they called, rigid theories. One participant commented:

> As teachers we're busy all the time in preparing, correcting students' work, following up plans, etc., there's little time to read. No one will ask why I'm doing a certain action as long as it's done perfectly, and this is what I like about action research; its practicality.

4.4 Answer to the fourth question

To answer the fourth question which was stated as follows: "Are there differences between the teachers' involvement in the action research based-training program and their perspectives of teaching English language skills and areas?", the researcher tested the following study second hypothesis: There are no statistically significant differences at ($\alpha \leq 0.05$) between the mean scores of teachers' perspectives

of teaching language skills and areas prior to and after their involvement in an action research -based training program."

To compare the teachers' perspectives of their teaching techniques of language skills and areas before its implementation and after that, the researcher used Wilcoxon Signed Ranks Test, whose results are outlined in Table (4.4) below.

Table (4.4) : Wilcoxon signed ranks test for differences in teachers' perspectives prior to and after their involvement in the action research-based training program

Domains	Ranks	N	Mean Rank	Sum of Ranks	Z	Sig. Value	Sig. Level
Teachers as researchers	Negative Ranks	2	2.750	5.500	3.241	0.001	sig. at 0.01
	Positive Ranks	14	9.321	130.500			
	Ties	2					
The nature of action research	Negative Ranks	5	7.900	39.500	1.756	0.079	Not. sig
	Positive Ranks	12	9.458	113.500			
	Ties	1					
Data collection in action research	Negative Ranks	5	5.400	27.000	2.568	0.010	sig. at 0.01
	Positive Ranks	13	11.077	144.000			
	Ties	0					
Limitations of action research	Negative Ranks	4	7.875	31.500	2.134	0.033	sig. at 0.05
	Positive Ranks	13	9.346	121.500			
	Ties	1					
Total	Negative Ranks	4	3.750	15.000	3.071	0.002	sig. at 0.01
	Positive Ranks	14	11.143	156.000			
	Ties	0					

"Z" table value at (0.05) sig. level equal 1.96
"Z" table value at (0.01) sig. level equal 2.58

Table (4.4) shows that the computed (z) values of the 1st, 3rd, and 4th domains were **(**3.241), (2.568) , (2.134) respectively, and were larger than tabled (z) values at (0.05) and (0.01) sig. levels, which were (1.96) and (2.58). As a result, the findings proved there were statistically significant differences between pre and post-questionnaire in the first, third, the fourth domains and the total degree of the questionnaire in favor of the post-questionnaire. This means that the program was influential in bringing about positive changes in in-service teachers` perspectives towards experimenting with new teaching techniques. Therefore, the null hypothesis is rejected.

Table (4.4) also reveals that the computed (z) at (0.05) and (0.01) of the second domain of the questionnaire was (1.756), which is less the than table (z) value. Accordingly, the results denoted there were no statistically significant differences between pre- and post-administrations of the questionnaire in the second domain, which indicated the training program did not have a large effect on the participants' attitudes and perspectives about the nature of action research. Therefore, the null hypothesis is accepted for the second domain.

The qualitative data from the diaries and the focus group meetings stressed the teachers' interest in taking live experiences and practical solutions. Some of the teachers documented the following;

> At the beginning, we were uncertain about the potentials action research bears to help us overcome the problems we confront in our classes, yet this methodology proved to be highly effective and informative.

Another argued:

> I'm no longer afraid of trying new techniques; having remained passive only increases the problem. Once the problem is identified, action becomes possible. There is no room for the word "impossible in teaching. Just get started!

Others assured their mere interest in practical feature of action research apart from studying about theories underpinning it. One teacher noted, ‘‘We're interested in how to do things, and not why we're doing them. Moreover, I didn't have time to revise and read about research. "

To calculate the effect size, the researcher used "η2" effect size by using the equation mentioned above and whose results are outlined in Table (4.5) below:

Table (4.5) : "Z" value, Eta square "η^2 ", for each domain of the questionnaire and the total degree

Domains	Z	Z^2	$Z^2 + 4$	η2	Effect Size
Teachers as researchers	3.241	10.504	14.504	0.724	Large
Data collection in action research	2.568	6.592	10.592	0.622	Large
Limitations of action research	2.134	4.553	8.553	0.532	Large
Total	3.071	9.433	13.433	0.702	Large

Table (4.5) shows that the total effect size was (0.702), which gave more evidence that there is a large effect size of the training program on the teachers' perspectives on the first, third, and the fourth domains.

4.5 Answer to the fifth question

In an attempt to answer the fifth question which was framed as follows: Are there statistically significant differences at ($\alpha \leq 0.05$) between the mean scores of the teachers' application of action research prior to and after their involvement in the training program? ', the third null hypothesis which was stated as follows: "There are no statistically significant differences at ($\alpha \leq 0.05$) between the mean scores of in-service teachers' application of the action research prior to and after their involvement in the training program", was examined.

To compare the score of the difference in the application of the action research prior to and after the teachers' involvement in the training program, the researcher used Diagnostic analysis and Wilcoxon Signed Ranks Test, whose results are outlined in (Table 4.6).

Table (4.6) : "Wilcoxon Signed Ranks Test" for results of differences between the experimental group pre and post observation for all domains and total degree of the observation card

Domain	Ranks	N	Mean Rank	Sum of Ranks	Z	Sig. Value	Sig. Level
FOCUS	Negative Ranks	0	0.000	0.000	3.743	0.000	sig. at 0.01
	Positive Ranks	18	9.500	171.000			
	Ties	0					
RATIONALE	Negative Ranks	2	4.500	9.000	3.371	0.001	sig. at 0.01
	Positive Ranks	16	10.125	162.000			
	Ties	0					
ACTIONS	Negative Ranks	1	3.500	3.500	3.377	0.001	sig. at 0.01
	Positive Ranks	15	8.833	132.500			
	Ties	2					
QUESTIONS	Negative Ranks	0	0.000	0.000	3.422	0.001	sig. at 0.01
	Positive Ranks	15	8.000	120.000			
	Ties	3					
DATA COLLECTION TECHNIQUES	Negative Ranks	1	16.500	16.500	3.039	0.002	sig. at 0.01
	Positive Ranks	17	9.088	154.500			
	Ties	0					
ACTION MEETINGS AGENDA (FOCUS GROUP)	Negative Ranks	0	0.000	0.000	3.685	0.000	sig. at 0.01
	Positive Ranks	17	9.000	153.000			
	Ties	1					
Total	Negative Ranks	1	1.500	1.500	3.661	0.000	sig. at 0.01
	Positive Ranks	17	9.971	169.500			
	Ties	0					

"Z" table value at (0.05) sig. level equal 1.96
"Z" table value at (0.01) sig. level equal 2.58

Table (4.5) shows that (z) total computed value (3.661) was larger than table value at both sig. (0.05) and (0.01) which were (1.96) and (2.58) respectively. This indicates that there were statistically significant differences between pre and post-observation card in all domains and the total degree of the observation card, which meant that the program was influential, and the teachers' application of their individual programs improved significantly as their application showed more confidence and better professionalism in carrying out successful classroom investigation. Consequently, the null hypothesis is rejected.

To calculate the effect size, the researcher used "η2" effect size formula. Hence, the results are outlined in Table (4.7).

Table (4.7) : "Z" value, Eta square "η^2", for each observation card domain and the total degree

Domains	Z	Z^2	$Z^2 + 4$	η2	Effect Size
Focus	3.743	14.011	18.011	0.778	Large
Rationale	3.371	11.366	15.366	0.740	Large
Actions	3.377	11.406	15.406	0.740	Large
Questions	3.422	11.707	15.707	0.745	Large
Data collection techniques	3.039	9.233	13.233	0.698	Large
Action meeting agenda (focus group)	3.685	13.582	17.582	0.772	Large
Total	3.661	13.405	17.405	0.770	Large

Table (4.7) reveals that there is a large effect size for each domain and the total score of the observation card with a total effect size of (0.770) which again assures the training program enabled the teachers with a kit of skills to develop their own research to examine their practices. One of the teachers commented as follows; "Action research made me a 'researcher'. Now, I have more confidence and feel more powerful to act"

Another teacher stressed the same point saying:

> Now, I do not see the problems as I used to before. I myself intervene to make a change, and I also study the change and modify according to the new findings. I've become aware of the importance of working systematically.

Summary

Chapter 4 focused on the analysis of data and its results. Different statistical techniques were used to answer the questions and verify the hypotheses .The results revealed the large impact of action research–based program in improving in-service teachers' techniques of English language areas and skills. They helped further the teachers' background knowledge of action research and improved their perspectives of the effectiveness of action research on their teaching techniques. It also demonstrated the teachers' inclination to assume their responsibilities to act as insider researchers. The next chapter will outline the discussion of the findings, conclusions and recommendations.

Chapter V
Discussion of Findings, Conclusions And Recommendations

Chapter V

Discussion of findings, conclusions and recommendations

This chapter discusses the results of the study. It highlights the conclusions in the light of the study results, as well as, some pedagogical implications. The researcher has proposed some recommendations which can render more insight into the benefits of action research for educators, supervisors, teachers and researchers, which will in turn, improve English language teaching techniques.

5.1 Study Findings

In Chapters 4, the findings of the study were stated as follows:

1. There were statistically significant differences at ($\alpha \leq 0.05$) between pre and post-test in Analysis and HOTs domains and the total degree of the test in favour of the posttest due to the training program.
2. There were no statistically significant differences at ($\alpha \leq 0.05$) between pre and post-test in Knowledge and Comprehension domains due to the training program.
3. There were statistically significant differences at ($\alpha \leq 0.05$) between pre and post-questionnaire in the first, third, fourth domains and the total degree of the questionnaire due to teachers' involvement in the training program.
4. There were no statistically significant differences at ($\alpha \leq 0.05$) between the pre and post- questionnaire in the second domain due to teachers' involvement in the training program.
5. There were statistically significant differences at ($\alpha \leq 0.05$) between pre and post-observation card in all domains due to the training program.

Overall, the findings of the study stressed that the teachers' background knowledge improved, and the program positively affected the teachers' perspectives of their teaching techniques. Moreover, the training program enabled the teachers to better carry out their individual action-research projects.

5.2 Discussion of the Study Findings

This study investigated the effectiveness of an action research-based program in improving English teaching techniques of in-service teachers in Middle Directorate of Education. The mixed-method approach was implemented to achieve

the purpose of the study. The current study is a multiple case study. Eighteen in-service teachers who constituted the study sample were purposively chosen. They showed willingness and readiness to take part in the study in order to improve their teaching competencies and further their understanding of their teaching practices.

A 12-hour training program, divided into 4 sessions, was administered in this study where the participants were introduced to a deeper understanding of the dynamics of action research. Consequently, the participants were required to design their own individual action research projects.

For data collection, the researcher employed five tools: an achievement test, a questionnaire, an observation card, a focus group, and diaries. Both quantitative data, which was analyzed by using SPSS, and the qualitative data, which was decoded; arranged in tables to anticipate common aspects and themes, were used to formulate the broader picture on which researcher relied to assist her discussion and interpretations of the study findings.

5.2.1 Discussion of the findings of the first and the second study questions.

The first question addressed the nature of action research, and the findings asserted that action-research projects enhanced teachers' knowledge of action research. On the other hand, the second study question investigated which language skills and areas were to be addressed by the teachers' improved teaching techniques.

Given the teachers' diaries and their discussions in the focus group, diversity of qualitative data were gathered. Some conclusions about the findings of the first and the second study questions are illustrated and elaborated in the following points.

a.Teachers' attitudes towards the training program

At the beginning of the program, the participants expressed their fear and concerns about the additional work they were required to do. Yet, after they got engaged in their projects, these concerns tended to dissolve once they began to observe the positive effects of these projects on their teaching as well as on their students' achievement. The training program enlightened them concerning the importance of making changes. Following are some of the teachers' comments on the action-research-training program. One participant said, "Action research is a new experience to me. and will definitely improve my practices in the classroom".

Another commented, "If we conduct action research frequently, the quality of education the teachers present, will vary largely." A third participant elaborated by saying:

> I did not welcome the idea of exerting extra effort at the beginning, but the students' reaction surprised me. They were eager to see what new strategies I was going to implement. At times, I took it as a kind of punishment; if they were not behaving well as expected, no more techniques would be introduced.

A fourth participant added, "The project encouraged me for further work. It made me feel like a researcher; which I liked most." In a similar vein, another participant said, "Action research made me a 'researcher'. Now, I have more confidence and feel more powerful to act. It also helped me undertake initiatives and experiment with other techniques."

b. Teachers' comments on their individual projects.

Depending on the qualitative data from the diaries and focus group, some of the teachers' impressions about their action research-based programs were as follows. One participant wrote in her diary:

> I couldn't believe how many students will be that active on the Facebook page I designed. Despite the frequent cut of power, the students used to check the page as soon as power was available, to comment and do the grammar quizzes which I uploaded. The project was a great help to keep me more focused on the sound plan.

Another participant said:

> I always wondered if there was a way to involve 11th graders in literature sessions. They did hardly pay attention during the lesson. However, when I presented student-centred activities, the problem dissolved gradually. I used role play, dramatization of the events of the story, visualization, etc. My students were attentive and I never said "Pay attention" to them again. It was a rewarding experience for me and my students, too.

Another teacher participant elaborated:

> Both my 1st graders and their parents were interested in my research. They were happily designing attractive cards of the alphabet. The children were happy to sing, play and make alphabet from clay. Painting the alphabet was the best part. They were really

> learning through fun. I was encouraged to apply the project next year and follow up with further innovative ideas.

Still another teacher commented on her action-research project by saying, “It is good relief for a teacher when she observes that students’ performance improved within a very short time.”

To sum up, the study participants were highly enthusiastic about their projects as they observed how fruitful and rewarding they were despite the time and effort they exerted.

c. Becoming a Reflective Teacher

Practising reflection was a big challenge for the participants of the study. They acknowledged that there were lots of problems in their classrooms and this caused annoyance and dissatisfaction for them. Moreover, they thought they were paralyzed as to solving them due to their heavy teaching load and responsibilities, and the difficult political and economic circumstances.

Reflection is not an automatic process. There are many instances where teachers are not able to see what is wrong with their classroom performance (Akbari, 2007). Problem identification needed a trained critical eye able to narrow the scope of investigation and articulate the problem precisely. Teachers needed to be trained on how to practice critical analysis and engage in the spiral steps of action research.

The suggested program yielded valuable opportunities for the participants to become reflective. As the program progressed, they showed more confidence regarding acquiring better skills of reflecting on their classroom performance, and consequently improving it. They expressed their pleasure with the acquisition of reflection skills and becoming actively engaged in examining their own practices.

One of the teachers wrote in her diary:

> I'm no longer passive about the problems I see in my classes. Reflection helped me think deeper about my classroom and about myself too. Now, I can identify the problem, separate it from others, and think of a practical plan.

Another participant observed, “Instead of improvising and working haphazardly, reflection cut it short to the point. With careful thought, I can figure out problems and overcome them." Some expressed the importance of reflection in empowering action by saying:

> Reflection enabled me to act more confidently and trust my actions. It enabled me to decide on the activities and techniques to engage my students and activate my classes.

The teachers' quotes stressed that reflection equipped them with trustworthy tools to provide answers to their classroom concerns and improve the quality of their teaching as well.

d.The Importance of the Focus Group Discussions

The discussions of the focus group allowed further opportunities for the participants to collaborate with colleagues and the supervisor to exchange ideas, concerns, suggestions and experiences. The teachers documented their feelings of satisfaction and relief towards being able to talk freely without being blamed or criticized. One of the teachers elaborated:

> During the focus group meetings, I felt everybody was acting as a facilitator and supporter of everyone else's work. I always waited eagerly for the next meeting, and the bunch of ideas we would arise and exchange.

Another participant stated:

> The focus group multiplied the value we got from action research. We could adapt, modify and adjust our projects. Simply, it made us feel more secure in the work we did… We always longed for something to break our professional isolation. Peers' discussions enabled the whole group to develop. Everyone is a winner… The group advice always kept me on the track with my project. They were the safety blanket for me.

e. Teachers Acting as Researchers

Assuming the responsibility of a researcher was faced with much skepticism by the participants of the study, mainly at beginning of the training program. The teachers showed concerns about their ability to carry out action research projects to investigate their practices. They were frightened of asking critical questions about their classrooms for fear of not getting satisfying answers to meet them. In addition, it was the first time for them to bear responsibility to find answers on their own to meet the challenges and shortcomings concerning their classrooms and their professional growth, too.

The training program provided a precious chance for the teachers to discover their abilities to implement classroom investigation and study their findings to trigger

the desired change as well as offering valuable knowledge and insight concerning their classrooms. Following are some of the teachers' comments from the qualitative data gathered:

> It gave me a real satisfaction to act as a researcher. You feel yourself one step forward as a professional. It will absolutely be part of my teaching career… I was willing to carry out my research. I acquainted my students from the beginning with the ends of the project so as to stimulate them to be more engaged. We felt we were equal participants in the project.

In conclusion, the training program broadened the teachers' knowledge about the nature of action-research projects and stimulated them to consider their teaching techniques of English language skills or areas. The teachers reported how they were enabled to successfully investigate their practices and improve them depending on the valuable opportunities which the program lavishly presented.

5.2.2 Discussion of the findings of the third question.

The results of the study third question which inquired about the difference in the mean scores of the teachers' background knowledge of action research in the achievement test prior to and after their involvement in the action research-based training program were as follows:

1. There were statistically significant differences at ($\alpha \leq 0.05$) between the mean scores of the pre- and post-test in the Analysis and HOTs domains.
2. There were no statistically significant differences at ($\alpha \leq 0.05$) between the mean scores of the pre and post-test in the Knowledge and Comprehension domains of the test.

The results indicated that the training program was influential in the Analysis and HOTs domains. In other words, the action research-based training program rendered the teachers a diversity of advantages as follows:

1. It gave English language teachers a gist about action research.
2. It helped raise the teachers' awareness of some teaching puzzles related to teachers, learners and curriculum.
3. It developed an increased awareness of the how to set goals and design informed practices.
4. It increased appreciation for theory, provided an avenue for informing theory, and demystified research.

5. It furthered understanding about the dynamics of classroom practices and ways to ensue improvement.
6. It fostered teachers' knowledge about teaching and learning situations and contexts.
7. It provided opportunity to gain knowledge and skill in research methodology and applications.
8. It enabled them to engage fellow colleagues in the problem-solving process for consultation.

The teachers' diaries revealed how the teachers' introduction to action research in the training program enhanced their knowledge of action research. One of the teachers remarked, " Honestly, I've never heard of this methodology before". Another added,

> I felt highly embarrassed when the researcher asked us if we knew what action research was. However, things have changed now; I can confidently talk about what action research is, and how to conduct a successful one, too.

One of the participants commented:

> When the head teacher told me that the researcher chose me to participate in an action research- training program, I didn't dare to tell her that I had no clue what action research might be…..As the program proceeded, I was proud of taking part in the program, and was thankful for being given me the opportunity to know about this viable methodology."

It can be easily concluded from the teacher participants' accounts that they gained knowledge of and insights into action research. Such findings conform with those of many of the previous studies such as those of Gungor (2016), whose study assured the beneficial and practical aspects of action research which enhanced teachers' knowledge about their profession. The findings also agree with those of Sowa (2009), who reported the positive impact action research had on pre-service teachers in fostering their knowledge and practices. Overall, the training program provided a precious chance to inform the teachers about the nature of action research, its dynamics and steps.

The second finding of the third question showed that there were no statistically significant differences between the pre- and post-test mean scores in the Knowledge and Comprehension domains of the test. That is to say, the program had less effect

on increasing the teachers' knowledge in these domains. Such findings can be attributed to the following reasons:

a. The subjects of the study showed interest in the application and the practical aspects of action research-based programs rather than memorizing facts and information about the presented methodology.
b. The sessions were held after school attendance and teachers did not have time to review the presented theoretical knowledge regularly.
c. The training program required more sessions, yet the researcher was bound by administrative confines. Hence, most focus was given to the implementation of the individual projects.
d. The teachers' experience in teaching facilitated their ability to analyze and deal with higher levels of thinking skills out of their professional background rather than memorizing knowledge, which affected their score in the Knowledge and Comprehension domains in the achievement test.
e. School teachers mainly focus on what they apply in their classes. Theoretical knowledge is generally avoided as it does not constitute a component in the annual assessment which is done by both the supervisor and the head teacher. Consequently, teachers do not have strong incentive to increase their knowledge. Accordingly, they limit their interest to empirical experiences.

Similar reflections and opinions were apparent during the meetings and in the diaries. One teacher documented, " Our annual assessment depends on what the head teacher or the supervisor observes in the classroom. Little attention is paid to educational readings about emerging methods. " Another one claimed, "We hardly had time to read more about action research. Power cut made it almost impossible"

The same idea was expressed by one of the teachers who stated," I teach at a Low Basic school and give 4 periods a day, besides correcting students' books and notebooks… I 'm almost engaged all the time to find time to read anything."

In contrast, many expressed their dissatisfaction with ceasing to learn once they graduated from university. A teacher admitted:

> I wish I had time to be acquainted with the field of research and methodology. Unfortunately, the burdens of life and profession take me away…I was frustrated when I couldn't recognize many words in the sessions. Thanks to the program, now I have a good background about action research. It was such a great opportunity to be introduced to this beneficial methodology.

To conclude, the ongoing process of action research during the training program provided the teachers with rich theoretical background to motivate them to become more accountable and responsible for their teaching and learning. Despite its pitfalls and shortcomings, it proved to be largely informative and influential on their practices and knowledge.

5.2.3 Discussion of the findings of the fourth question.

The findings of the fourth question, which investigated the differences between the teachers' involvement in the action-research based training program and their perspectives of teaching English language skills and areas**,** proved the following:

1. There were statistically significant differences at ($\alpha \leq 0.05$) between the mean scores of the pre- and post-questionnaire in the first, third and fourth domains and the total degree of the questionnaire.
2. There were no statistically significant differences at ($\alpha \leq 0.05$) between the mean scores of the pre- and post-administration of the questionnaire in the second domain.

The administration of the questionnaire affirmed that there were apparent differences between the participants' involvement in the action research-based training program and the positive change in their perspectives of their own teaching of language skills and areas. The positive shift in their perspectives was manifested in the following:

1. Participants identified action research as an autonomous tool to help English language teachers learn and adapt their teaching practices.
2. Teachers felt responsible for their professional development and growth to maintain and enhance the quality of teaching and learning.
3. It provided teachers with tools to gather and interpret data collected in context.
4. It focused their attention to the systematic and cyclical nature of action research.
5. It oriented their attention to their role as agents of change and not as merely the objects of change.
6. The positive change they felt in their practices and its impact on their students enhanced their attitudes towards adopting action research to help them grow more knowledgeable and conscious about their practices.

7. Action research enhanced and encouraged reflection as a core aspect of professional growth.
8. It developed skills required to know what to teach and how to teach.
9. It broke the barrier of hesitation to adopting new teaching techniques and studying their effects on their teaching as well as on their students' learning.
10. Teachers were no longer afraid to address various issues in their classrooms and make informed decisions to improve or rectify them.
11. It allowed them to trigger change and to study the change about their practices.

Similarly, excerpts from some participants' diaries also highlight the strong relationship between the participants' involvement in the action research-based training program and the positive change in their perspectives of their own teaching of language skills and areas. One participant wrote, "I learned a lot by doing. When you assume responsibilities for change, you are more motivated for work." Another also said, "It motivated me much to work on the issues I identified for myself." A third participant added, "Action research enabled me to search my actions, my students', and others' too."

The findings of the fourth question conform with those of Kayaglu's (2015) study, which indicated that becoming able to construct action research enhanced teachers' positive attitude towards the benefits which action research renders to their professional growth ,as well as enhancing the quality of their teaching. Likewise, Hine and Lavery's (2014) and Shanks, et al.'s (2012) studies stressed the empowering value of this inquiry methodology and teachers' inclination to incorporate it in their profession. Similar findings were reached by Whankhom, et al. (2016), Kimhachandra (2010), Gutiérrez, et al. (2015), Jaatinen (2015), Jung and Suzuki (2015), and Sowa (2009).

Nevertheless, Gore and Zeinchner and Kenneth (1991), who speculated that they only found evidence on the teachers' favouring view of action research, claimed less evidence was found regarding reflective thinking, which is a core element in the process of action research. Hence, they suggested that stimulating changes in student teaching courses requires analyzing action research reports.

The second finding of the fourth question, which investigated the impact of an action research-based training program on teachers' perspectives, demonstrated that the training program had a small effect on the second domain of the questionnaire.

That is to say, the program improved the teachers' attitudes towards the nature of action research but not largely.

These findings can be attributed to the following reasons.

1. Knowledge about the second domain needed recognizing specific data about action research, but little attention and effort were exerted to long-term memorization of the theoretical knowledge regarding action research.
2. The training program needed more meetings, yet the researcher found it difficult to hold more than one meeting a week due to administrative limitations.
3. The focus group meetings were held once a week though the researcher tried to compensate for this pitfall by regular visits to participants' schools.
4. Teachers were concerned about the additional work action research-based training program necessitated. They only had time to carefully apply their projects and experiment with new techniques which required time and effort.

Similarly, the reasons mentioned concerning the Knowledge and Comprehension domains still represent a logical interpretation of the present domain since both the Knowledge and Comprehension domains besides the 'Nature of Action Research' domain depended on remembering, which was unattainable due to the reasons highlighted previously.

To conclude, the training program introduced the participant teachers to find real solutions to the problems they encountered in their classrooms, which is evidently reflected positively and strongly on their attitudes and perspectives of their teaching practices. In other words, teachers' investigation of their classrooms made teaching more meaningful for both the teachers and their students, and affected teachers' attitudes positively as to assuming more accountability for their roles as inquirers and researchers.

5.2.4 Discussion of the findings of the fifth question.

The findings of the fifth question which investigated the teachers' application of action research-based program using an observation card concluded that there were statistically significant differences in the teachers' performance in the first and the second sessions of observation. It documented that improvement was made in their application.

The teachers were satisfied with the results they got after implementing their own action research-based programs despite their initial worries about the time and efforts needed. Such worries dissolved as they progressed in their programs and sensed the impact they had on their teaching as well as on their students' learning. Simply, they were becoming better action researchers.

These findings could be explained as follows:

1. Better understanding of the dynamics of action research occurred and teachers benefitted from consulting with the other participants of the study.
2. The teachers' reflections in their diaries showed more satisfaction with their application, which was fostered and modified as the project developed.
3. The researcher's regular visits cleared out ambiguity about issues concerning action research.
4. Worries about the impact which action research may have on the teachers' performance dissolved as they witnessed their students' interest in the newly-used techniques and their passion to experience varied teaching strategies.
5. The satisfaction, which the teachers' schools expressed about their work, encouraged the teachers to go further in implementing more strategies.

Constructive feedback from the researcher, their fellow colleagues and the head teachers asserted the teachers' work and empowered them to go ahead with their action research. Similarly, comments reflected in the diaries and the focus group protocol asserted a better application of their action research as revealed in the following excerpts from their diaries. One participant wrote:

> Keeping in mind the results of my own work which I was keen on, I can conclude that I was doing better. At the start of the program, I felt things were messy. Then, I learned to organize my steps and consequently my action research proved to be fruitful.

Another participant remarked:

> I didn't actually know what things to investigate in my class as everything seemed worthy working on. Finally, I observed my practices, my students and confined my research to one problem. The program kept me on shore, and right on the track towards the successful end of the project.

In a word, the findings of the fifth question demonstrated that having observed the teachers' individual action research- projects, the researcher noticed they were acquiring more confidence and trust about their abilities to perform classroom research. The findings are in harmony with the findings of many studies such as those of Sela (2012), Brown (2002), Tomas (2011), and Shanks, et al. (2012). Meanwhile, Hine and Lavery (2014) stressed the empowerment action research yields to language teachers, yet they called for considering the limitations on the generalization of the findings of action research.

Broadly speaking, the participants of the study were satisfied with the results they obtained after implementing their own action research-based programs despite their initial worries. The training program was undoubtedly highly effective and influential in improving the teachers' application of action research projects. Furthermore, it furthered and empowered their professional growth.

5.3 Study Conclusions.

In the light of the findings of the study and their interpretations, the following conclusions were drawn:

1. This study shed light on the importance and the effectiveness of action research in furthering teachers' professional development and enhancing their teaching techniques of the language skills and areas.
2. The study revealed that a number of positive changes occurred in the teachers' perspectives about their role as insider researches investigating their own practices, collecting data and modifying such practices accordingly away from the top-down culture of research where teachers passively apply the findings of research done by others.
3. It is noteworthy to notice that teachers became more aware of the systematic process of action research and its implication to handle the most pressing issues more deliberately and consciously.
4. The study encouraged reflection as an integral part to identify issues to investigate and improve teaching, learning and curriculum by providing the teachers with worthwhile feedback to consider for future adjustment.

5. Teaching becomes more meaningful when teachers assume responsibility to investigate what goes on in their classrooms and adopt the researcher-teacher model.
6. The study illustrated the importance of depending on reliable sources of data about the phenomena addressed to reach informed solutions.
7. The study highlighted the importance of documenting the data and referring to them to make conclusions.
8. The study helped teachers develop reflective and analytical skills needed to maintain life-long learning on the part of teachers to foster their efficacy.
9. The study drew the teachers' attention to the importance of self-evaluation to enhance creativity, self-development and decision-making skills.

5.4 Study recommendations

Drawing on the findings and the conclusions of the study, the researcher puts forward the following recommendation to the different stakeholders of the EFL teaching-learning process.

5.4.1 Recommendations to EFL Teachers:

EFL Teachers are recommended to:

1. Implement action research in their classrooms to assess their practices and discover points of strength and weakness to modify and enhance their teaching.
2. Cooperate to do action research either individually or collaboratively to discuss issues of concern with their colleagues, supervisors and the local community.
3. Adopt reflection as a fruitful tool to evaluate, propose solutions, implement and modify their practices.
4. Cultivate professional accountability for their growth.
5. Adopt new strategies and techniques to bring life into their classes.
6. Gather data about teaching, learning and curriculum.
7. Develop their analytical and reflective skills.
8. Be able to manipulate various sources of data to clearly and precisely evaluate the context of teaching and learning.
9. Read about methodology and remain up-to-date with the latest strategies and findings of research to cope with the consistent changes in the field of education.
10. Dedicate some time for refreshing their knowledge in methodology and linguistics.

11. Incorporate technology in their teaching practices.

5.4.2 Recommendations to the faculties of education in universities:

Faculties of education in universities are recommended to:

1. Include action research in their teaching courses and require pre-service teachers to implement their own action research projects.
2. Bridge the gap between theory and practice by enabling pre-service teachers to adopt the role of a researcher.
3. Encourage student teachers to be innovative in their practices by engaging them in identifying, analyzing and suggesting changes.
4. Tailor research projects specifically to the needs of particular issues and empower practitioners to find localized, practical solutions required for effective change to take place.
5. Use the reflective approach in methodology courses and require student teachers to practice them.
6. Construct and execute training courses on action research.
7. Encourage more research on action research by academics and lecturers.
8. Holding workshops, conferences and training sessions to train teachers on the latest research methods in education to empower their teaching competencies.

5.4.3 Recommendations to supervisors and mentors:

Supervisors and mentors are recommended to:

1. Encourage teachers to look into their practices and teaching.
2. Construct action research-training programs to enable in-service teachers to assume responsibility for their professional growth.
3. Urge teachers to discuss their reflective teaching approach and action research to exchange ideas and experiences with their colleagues, head teachers and, supervisors.
4. Motivate teachers to conduct action research and publish their findings.
5. Reward teachers who adopt new approaches of teaching to foster their professional growth and enhance students' learning.
6. Facilitate teachers' usage of new approaches by providing teachers with necessary equipment.
7. Establish links between schools and universities to encourage research and application of theories.

8. Enable teachers to apply action research and reflective teaching by reducing their academic load.
9. Take into account teachers' research and application of research in their annual assessment of teachers.
10. Consider teachers' promotion according to their involvement in research and improved competencies.
11. Establish educational readings about emerging methodology as a core part in in-service teachers' training.
12. Forward educational readings to schools to be read by teachers and discussed in future meetings or supervisor's visits.

5.4.4 Recommendations for further studies

Drawing on the findings of the study, the researcher suggests the following:

1. Further studies on action research are to be conducted addressing issues about learning, teaching and curriculum.
2. Examining the effectiveness of action research on pre-service and in-service teachers, and students.
3. Participatory action research is to be administered to encourage collegial cooperation in research.
4. Head teachers and supervisors are encouraged to administer similar action research to get enlightened about the phenomena encountered.

The Reference List

The Reference List

The Holy Quran

Ado,K.(2013). Action research: Professional development to help support and retain early career teachers. *Educational Action Research, 21*(2), 131-146.

Afana, E.(2000). The Effective Size, And Its Use In Discovering The Validity Of Educational And Psychological Studies. *Palestinian Educational Researches And Studies*,3(1).

Ahmadian, M. J.& Tavakoli, M.(2011). Exploring the Utility of Action Research to Investigate Second-Language Classrooms as Complex Systems. *Educational Action Research, 19*(2), p121-136.

Ashar, H.,& Lane, M.(1993, Fall). Focus groups: An effective tool for continuing higher education. *Journal of Continuing Higher Education, 41*(3), 9-13.

Bogdan,R.,& Biklen, K.S.(2007). *Qualitative research for education: An introduction to theories and methods (5th). ed.* Pearson Education.

Borg,W.(1981). *Applying educational research: A practical guide for teachers.* New York: Longman.

Brown, B.L. (2002). *Improving teaching practices through action research.* (Unpublished Master's Thesis). Virginia Polytechnic Institute and State University, Virginia.

Brown, D.H.(1994). *Teaching by Principles:an Integrated Approach to Language Pedagogy.(*3rd Ed). New Jersey: Prentice Hall Regents.

Burns, A. (2009). *Action research in second language teacher education*. In A. Burns and J.C. Richards (Eds.), *The Cambridge guide to second language teacher education* (289-297). Cambridge: Cambridge University Press.

Caro B.C.,& Klehr .R.,& Zeichner.K.(2007). *Creating Equitable Classrooms Through Action Research* . California: Corwin Press

Cherry,N.(1999). *Action Research: A pathway to Action, Knowledge, and Learning*, Melbourne: RMIT University Press.

Cohen, L., & Manion, L.(1994). *Research Methods in Education.* (4th ed.). London: Routledge.

Corey, S.M. (1953). *Action research to improve school practices.* New York: Teachers College Press.

Danielson,C.,& McGreal.T.(2000). *Teacher evaluation: To enhance professional practice*. Alexandria, VA: Association for Supervision and Curriculum Development.

Dick.B.,(1992). Practising what we preach: identifying the gaps between espoused and actual values. *The Australian Values Institute Journal, 1*(4), 27 -31.

Dick, B. (1997). *Action Learning and Action Research*. Retrieved June,2nd from http://www.uq.net.au/action_research/arp/actlearn.html

Ferrance, E.(2000). *Action research. Providence*, RI: *LAB at Brown University.*

Foshy, A.W.(1998). Action research in the nineties. *The Educational Forum*, *62*(2),108-112.

Field, J. (1997). Key concepts in ELT: Classroom research. *ELT Journal*, *51*, 192-193.

Freeman, D.(1991). *Language teacher education, emerging discourse, and change in classroom practice. In J. Flowerdrew, M. Brock & S. Hsia (Eds.), Perspectives on second language teacher education*. Kowloon, Hong Kong: City Polytechnic of Hong Kong.

Freeman, D.(1992). *Collaboration: Constructing shared understandings in a second language classroom. In D. Nunan (Ed.), Collaborative language learning and teaching*. New York: Cambridge University Press.

Freeman. D.L.,& Anderson.M.(2011). *Techniques and Principles in Language Teaching.* (3rd Ed.). London: Oxford University Press.

Gallagher .K.&,Bashir.A. .K.(2007). *New Classroom Voices. Action Research and initial Teacher Education in the UAE* . Abu Dhabi: HCT Press.

Gore , J.M.,& Zeichner ,K., & Jennifer, M. (1991). *Teaching and teacher Education, 7* (2) , 119-136.

Gungor, M.N.(2016). MA thesis: Turkish Pre-Service Teachers' Reflective Practices in Teaching English to Young Learners. *The Australian Journal of Teacher Education.* Retrieved March,22nd from *http://ro.ecu.edu.au/ajte/vol41/iss2/9/*

Gutierrez .K.G.C., Puello.M.N.,& Galvis. L.A.P.(2015*).* Using Pictures Series Technique to Enhance Narrative Writing among Ninth Grade Students at Institucion Educativa Simon Araujo. *English Language Teaching.* Retrieved March 22nd from http://dx.doi.org/10.5539/elt.v8n5p45

Harmer, J.(2003). *The Practice Of English Language Teaching England*. Essex: Pearson Education Limited .

Hayes, D. (2014*). Innovations in the continuing professional development of English Language teachers.* London :10 Spring Gardens SW1A2BN .

Hine, G.S.C,& Lavery.S.D.(2014). MA: The importance of action research in teacher education programs. *Teaching and Learning Forum.* Retrieved February,18th,from https://ctl.curtin.edu.au/events/conferences/tlf/tlf2014/refereed/hine.pdf

Hopkins , D. (1993). *A Teacher`s Guide To Classroom Research* .Buckingham : Open University Press .

Hord, M. S. & Sommers, A. W. (2008). *Leading professional learning communities. Voices from research practice*. London: Corwin Press.

Huges, I., & William, R. (2001). *Action Research. Electronic Reader: Planning your Action Research Project*. Retrieved November 2, 2006 from: http://www2.fhs.usyd.edu.au/arow/0/m01/huges3.htm

Jaatinen's. R. E.(2015). Promoting Interculturalism in Primary School Children through the Development of Encountering Skills: A Case Study in Two Finnish Schools. Education 3-13: *International Journal of Primary*, Elementary and Early Years Education , 43(6), 2015.

*Jung, I. & Suzuki.*Y. (2015). Scaffolding Strategies for Wiki-Based Collaboration: Action Research in a Multicultural Japanese Language Program. *British Journal of Educational Technology*, 46(4), 829-838.[Online].Retrieved.March,18th,from http://onlinelibrary.wiley.com/doi/10.1111/bjet.12175/abstract

Kayaglu, M.N.(2015). MA*: Teacher Researchers in Action Research in a Heavily Centralized Education System* .Retrieved February 12th from: http://www. tandfonline.com/doi/abs/10.1080/09650792.2014.997260.pp(140-161)

Kemmis, S., & McTaggart, R. (1988). *The action research planner.* (3rd ed.). Victoria, Australia: Deakin University Press.

Kimhachandra , I.(2010). *An Action Research Study of English Teaching in Grade Seven at Bamrung Wittaya School, Nakhon Pathom, Thailand* . (Unpublished Master's Thesis). Melboune: Victoria University.

Larsen-Freeman, D. & Anderson, M. (2011). *Techniques and principles in Language Teaching.* London: Oxford University Press.

Lavoie, C. , Mark, M.,& Jenniss, B.(2014). Indigenizing Vocabulary Teaching: An Example of Multiliteracies Pedagogy. *Diaspora, Indigenous, and Minority Education: Studies of Migration, Integration, Equity, and Cultural Survival*. *8*(4) 2014.

Mackey, A. & Gass, S. (2005). *Second Language Acquisition. Methodology and Design.* London: Lawrence Erlbaum Associates Publishers .

Markee, N. (1997). *Managing Curricular Innovation.* New York: Cambridge University Press .

Marzouqi, F.(2006). *Use of Correction Codes in The Development of Students` Writing Skills*. HCT teacher Education Series Book 2. Abu Dhabi: HCT Press.

McCtcheon, J.& Jung, B. (1990). *Alternative perspectives on Action research. Theory into Practice*, London: Oxford Press.

McFarland, K.P., & Stansell, J.C. (1993). Historical perspectives. In L. Patterson C.M.Santa ,C.G. Short , & K . Smith (Eds.), *Teachers are researchers : Reflection and action*. Newark, DE: International Reading Association.

McKernan, J. (1988): The countenance of curriculum action research: Traditional .collaborative ,and emancipatory-critical conceptions. *Journal of Curriculum and Supervision*. *3*(3).173-200.

McTaggart. R.(1991). *Action Research Deakin: A short and modern history.* Geelong University.

Mills, G. E. (2003). *Action research: A guide for the teacher researcher*. (2nd ed.). NJ: Merrill Prentice Hall.

Mills, G.E. (2011). *Action research: A guide for the teacher researcher*. (4th ed.). Boston: Pearson.

Mills, N. (2011*). Situated learning through social networking communities: The development of joint enterprise, mutual engagement, and a shared repertoire. CALICO Journal*, *28*(2), 345-368.

Muqattach, L. & Kailani, T. (1995). *ELT Methodology (1).* Amman: Al Quds Open University.

Newton, P., & Burgess, D. (2008). Exploring types of educational action research: Implications for research validity. *International Journal of Qualitative Methods*, *7*(4), 18-30.

Noffke, S. E. , & Stevenson, R.B. (1995). *Educational Action Research: Becoming practically critical*. New York: Teachers College Press.

Nunan, D. (1992). *Research Methods in Language Learning.* London: Cambridge University.

Nunan, D. & Richards, J. C. (1994). *Second Language Teacher Education.* London: Cambridge University Press.

Obaid, H. (2006). *The effect of teaching Vocabulary through the use of a teaching resource; vocabulary sacks.*Abu Dhabi: HCT Press.

Perrett, G. (2002). Teacher Development Through Action Research: a Case Study in Focused Action Research. *Australian Journal of Teacher Education*, *27*(2), 65-102.

Pinnegar, S. & Hamilton, M.L. (2009). *Self-study of practice as a genre of qualitative research: Theory, methodology, and practice*. Dordrecht, the Netherlands: Springer.

Richards, J. C. (1990). The teacher as self-observer: self-monitoring in teacher development. In J. C. Richards, *The language teaching matrix* (pp. 22-53). NY: Cambridge University press.

Richards, J. C. & Nunan , D. (1994). *Second Language Teaching*. New York: Cambridge Press.

Richards, J., & John P. (1992). *Longman Dictionary of Language Teaching and Applied Linguistics*. Essex: Longman.

Rubrico. J.C. U, Hashim. F. (2014). Facebook-Photovoice Interface: Empowering Non-Native Pre-Service English Language Teachers. Language Learning & Technology.*18*(3), 115-132.

Ruso, N. (2009). MA thesis. *An Action Research approach to apply Task Based Learning to a traditional classroom situation to find out solutions to certain*

*problems such as poor learners` motivation***.** Retrieved January,28th from: http://www.asian-efl-journal.com/pta_February_2007_tr.pdf.

Sagor, R. (2000). Guiding School Improvement with Action Research. Retrieved May,1st from: http://www.ascd.org/publications/books/100047/chapters/What-Is-Action Research%C2%A2.aspx

Schmuck, R. (2006). *Practical action research for change.* CA: Corwin Press.(2nd ed.).

Schon, D. A. (1983). *The reflective practitioner: How professionals think in action.* London: Temple Smith.

Sela, O. (2012). Action Research project on Computer –Supported Collaborative Learning In Teacher Education. *MERLOT Journal Of Online Learning and Teaching*. Retrieved, March,15th,from: http://jolt.merlot.org/vol9no3/sela_ 0913.htm

Shakhaweti, F. (2004). *The Effectiveness of Total Physical Response as a Classroom Management Strategy.* Abu Dhabi: HCT Press.

Shanks, J., Mailler, L. ,& Rosendale, S. (2012). Action Research in a Professional Development School Setting to Support Teacher Candidate Self-Efficacy. *SRATE Journal*, 21(2), 26-32.

Simpson, A. V. (2011). *An Action Research Study on Using Cooperative Learning During Graphic Design Classroom Crits Master of Education Research Theses.* (Master Thesis). *Paper 47*.Retrieved April,1st from: http://digitalcommons.cedarville.edu/education_theses/47

Somekh, B. (2006). *Action Research: A Methodology for Change and Development*. Maidenhead: Open University Press.

Sowa, P. A. (2009). Understanding Our Learners and Developing Reflective Practice: Conducting Action Research with English Language Learners. *Teaching and Teacher Education: An International Journal of Research and Studies, 25*(8), 1026-1032.

Stenhouse, L. (1979). Using Research Means Doing Research. In Dahl, H. , & Lysne. A ,& Rand. P.(ed.). *Spotlight on Educational Research* . Oslo: University Press.

Stringer, E.T. (1996). *Action Research: A handbook for practitioners*. London: SAGE Publications.

Tang, J. T. , Sung, Y. T., & Chung, K. (2016). Computer Assisted Language Learning. 29(5), 2016. Retrieved February, 20th from: http://www.tandfonline.com/doi/full/10.1080/09588221.2015.1113184

Terrell, S. (2011). Mixed- methods research methodologies. *The Qualitative Report*, 17(1), 254-280. Retrieved February,3rd from: http://www.nova.edu/ssss/QR/QR17 -1/terrell.pdf

Thomas, J., Harden, A. (2012). Becoming a Teacher Leader through Action Research. *Methods for the Thematic Synthesis of Qualitative Research*. Becoming *a* Teacher Leader through Action Research, *21*(8), 993–1011.

Trivino, C., & Andrea, P. (2016). Using Cooperative Learning to Foster the Development of Adolescents' English Writing Skills. *Profile Issues in Teachers' Professional Development*, 18(1), 21-38.

Vygotsky, L.S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.

Westwood, P. (2008). *What teachers need to know about Teaching methods.* Camberwell, Vic. : ACER Press .

Wallace, J. (1991). *Training Foreign Language Teachers: A Reflective Approach - Excerpt*. London: Cambridge University Press.

Whankhom, P., Phusawisot, P., & Sayankena, P. (2016). Development of the Instructional Model of Reading English Strategies for Enhancing Sophomore Students' Learning Achievements. *Educational Research and Reviews, 11*(5), 153-163.

WIDA Glossary of terms associated with English Language Proficiency standards (2005). Retrieved January,20th from: www.wida.us/resources//ellb-standard.overview/section-9htmlhttp://

Willis, J.(1983). *Teaching English through English* .London: Longman.

Yin, R. (1984). *Case study research: Design and methods* (1st ed.). CA: Sage Publishing.

Young , M. R. , Rapp , E. M. , & James ,W. (2010). Action Research: Enhancing Classroom practice and Fulfilling Educational Responsibilities. *Journal Of Instructional Pedagogies*., *4*(1), 62-93.

Appendices

Appendix (1)

The Islamic University – Gaza

Scientific Research Affairs

Faculty of Education

Department of Curriculum and Instruction

An Invitation to Referee a Pre-post Test

Dear referee/……

The researcher is conducting a study entitled "**The Effectiveness of an Action Research-Based Program in Improving In-service Teachers' Techniques in Teaching English**" to obtain the Master's Degree in curriculum and instruction.

To achieve the aims of the study, the researcher has designed a pre-posttest in the light of the table of specifications. The test aims at measuring the teachers' background knowledge of action research prior to and after an action research training program. The test consists of four different questions with a total of 50 marks covering the following points: the definition of action research , the steps of an action research plan, the questions, data collection and limitations of applying action research.

Because of the importance of your opinion and experience, you are kindly invited to referee the attached test, and I would be so grateful for your comments on its suitability, relevance, linguistic correctness and the importance of each procedure.

All your contributions are highly valued. If you have any comments, please write them down in the space below.

_____

_____

_____

_____

Thanks for your kind help and cooperation

The Researcher/

Amal Muhammed Abu Sharar

The supervisor/

Dr. Sadek Firwana

Action Research Pre-Posttest

Name: _____ Total:50 Marks

==========

A-Read the following statements and choose the correct answer from a, b, c ,or d:

(10 points)

1-There are different types of action research depending upon the _____ involved.

a- participants b- themes
c- outcomes d- assistants

2- The characteristics of action research are all of the following EXCEPT _____ .

a- cyclical b- situational
c- theoretical d-systematic

3- Action research is no more than trying out an idea and seeing what happens, and then modifying what you do in the light of your _____

a- research b- observations
c- hypotheses d- inquiry

4- Possible Action Research tools include all the following EXCEPT _____ .

a- questionnaires b- journals
c- teachers' books d- observation cards

5- Action research allows practitioners to address those concerns that are closest to them, ones over which they _____

a- can't influence or make change. b- can influence or change
c- doubt d- have no control

6- The value of action research is in all of the following EXCEPT _____.

a- the change that occurs in everyday practice
b- the improvement of the rationality of educational practices .
c- increasing the practitioners' knowledge
d- the generalization to a broader audience.

7- In choosing a question, teachers should consider _____

a- is it something of interest ?
b- is it worth the time and effort that will be spent?
c- is it doable and meaningful ?
d- a, b , and c.

8-Through action research, teachers can examine all of the following EXCEPT _____

a- instructional strategies b- learning activities
c- curricular materials d-the head teachers' intentions

9-_____ is a small gathering of individuals who have a common interest of characteristic where interaction is used to gain information about a particular issue.

a- interview
b- focus group
c- diaries
d- questionnaire

10- Action research is designed to deal with _____ problems.

a- unrealistic
b- concrete
c- uncertain
d- general

B- Number the Action Research steps giving the first step #1 and the last step #6 : (6 points)

a- Outcomes ☐
b- Intervention ☐
c- Reporting ☐
d- Hypotheses ☐
e- Problem identification ☐
f- Preliminary investigation ☐

C- Decide whether the following statements are true or false by ticking the appropriate box: (7 points)

No.	Statement	True	False
1.	Action Research involves planning, acting, observing, and reflecting on the changes in the social situations.		
2.	In Action Research participants examine their own educational practices systematically and carefully using the techniques of research.		
3.	Teachers and principals work best on problems they have identified for themselves.		
4.	In Action Research, the task is finished when the project is finished.		
5.	Diaries are introspective methods often used to gather data where participants report their thoughts, impressions and internal processes.		
6.	When practitioners use action research, it has the potential to increase the amount they learn unconsciously from their experience.		
7.	Action Research entails trying out ideas in practice as a means of improvement and increasing knowledge about the curriculum, teaching and learning.		

C-Decide on what is Action Research (AR) and what is not action research (NAR): (10 points)

No.	Statement	AR	NAR
1.	It is a library project where we learn more about a topic that interests us.		
2.	It is merely problem-solving trying to find out what is wrong.		
3.	It is a quest for knowledge about how to improve.		
4.	It is about doing research on or about people, or finding all available information on a topic looking for the correct answers.		
5.	It involves people working to improve their skills, techniques, and strategies.		
6.	It can serve as a chance to really take a look at one's own teaching in a structured manner.		
7.	It is about how we can do things better. It is about how we can change our instruction to impact students.		
8.	It is about learning why we do certain things.		
9.	It allows the teacher to identify additional questions raised by the data and plan for additional improvements, revisions, and next steps.		
10.	Its validity lies in its usefulness in helping people to act more intelligently and skillfully.		

D- Complete the following paragraph with words from the box: (5 points)

skills - question - responsibilities - intervention - context

Action research is demanding, complex, and challenging because the researcher not only assumes……1…….for doing the research but also for enacting change in a specific classroom ……2……. to improve teaching and learning. The research ……3……should be carefully framed and include the action or ……4…….that will be implemented and the intended outcome of the study. It requires time, patience, and sound planning, communication, and implementation ……5……..

Thank You

Appendix (2)

The Islamic University – Gaza

Scientific Research Affairs

Faculty of Education

Department of Curriculum and Instruction

Refereeing English questionnaire

Dear Professor, Supervisor, Expert teacher,……

The researcher is conducting a study entitled " **The Effectiveness of an Action Research-Based Program in Improving In-service Teachers` Techniques in Teaching English Language** " to obtain the Master's Degree in curriculum and instruction.

One of the requirements of this study is to conduct an questionnaire to measure English language teachers' perspectives of the effectiveness of action research prior to and after a training program to improve their teaching techniques . You are kindly requested to look carefully at the attached questionnaire and fill out the following form indicating whether the items of the questionnaire are suitable or unsuitable.

Your notes and responses will be highly appreciated and confidential, so please have a look at the scale and note down your opinion on:

1- The clarity of the questionnaire domains and items.
2- The suitability of the questionnaire items for measuring the teachers' perspectives of action research-based programs.
3- The belonging of each item to its domain.
4- The deletion or addition of items.

Any further comments will be highly appreciated.

_____
_____
_____
_____

Thanks a lot for your cooperation

Prepared by/Researcher

Amal Muhammed Abu Sharar

Supervised by/ Dr. Sadek Firwana

English Language Teachers' Perspectives of Action Research –based programs to improve their Teaching Techniques

		Strongly Agree (5)	Agree (4)	No Opinion (3)	Disagree (2)	Strongly Disagree (1)
Domain 1: Teachers as researchers						
1	Only teachers are in the position to create good teaching.					
2	Teachers, as researchers, need to reflect on their own teaching.					
3	Teacher researchers are listeners—people actively engaged in making new discoveries about their students, their teaching and themselves.					
4	Teacher research provides valuable knowledge for classroom practice.					
5	Concrete experience takes priority over fixed abstract principles.					
6	Teachers are the agents and source of educational reform and not the objects of reform.					
7	Good teachers observe their own practices, consider changes, and try new approaches and strategies.					
8	All teachers are capable of assuming responsibility for professional growth and development.					
9	Action research enables teachers to cope with ongoing change in their profession .					
10	Good teachers are autonomous in their professional judgment: they don't need to be told what to do.					
11	The secret of success in the teaching profession is to continually grow and learn.					
12	Teachers and principals work best on problems they have identified for themselves.					

		Strongly Agree (5)	Agree (4)	No Opinion (3)	Disagree (2)	Strongly Disagree (1)
Domain 2: The Nature of Action research:						
13	The action research process is characterized by a spiral of cycles.					
14	Action research is problem-focused.					
15	Action research involves people working to improve their skills, techniques, and strategies.					
16	Action research is about testing hypotheses to produce empirical results.					
17	In action research, teachers develop a plan of action to improve what is already happening.					
18	Brainstorming is a good way to develop answerable questions.					
19	Answerable questions usually begin with ''Why'', ''How'', or ''What''.					
20	Questions in action research should be of interest and worth the time and effort that will be spent.					
21	Research questions should be narrow enough to be answerable.					
Domain 3: Data collection in action research						
22	The collection of data is an important step in deciding a plan to work on.					
23	Data is any information that can help the teachers answer the question of the research.					
24	Teachers should be able to collect data that can help answer the questions.					
25	The data collection tools in action research can be observations, interviews, questionnaires and diaries.					

		Strongly Agree (5)	Agree (4)	No Opinion (3)	Disagree (2)	Strongly Disagree (1)
26	The data collected should be directly pertinent to the topic or issue of the intended research.					
27	Data never speaks for itself. Your mind is the most important analytical tool that you have.					
Domain 4: Limitations of action research						
28	Action research could be messy .					
29	Acton research is time consuming.					
30	Action research results are generalizable.					
31	Teachers are not equipped with needed skills to carry out action research.					
32	Teacher researchers have within them the power to meet all the challenges of the teaching profession.					
33	Unless and until teacher researchers face the hard questions, they will remain powerless to do very much to improve life in classrooms.					

Appendix (3)

The Islamic University – Gaza

Scientific Research Affairs

Faculty of Education

Department of Curriculum and Instruction

Refereeing Action Research Observation Card

Dear Professor, Supervisor, Expert teacher,……

The researcher is conducting a study entitled "**The Effectiveness of an Action Research-Based Program in Improving In-service Teachers` Techniques in Teaching English"** to obtain the Master's Degree in curriculum and instruction.

One of the requirements of this study is to construct **an Action Research Observation Card**. You are kindly requested to look carefully at the attached **Observation Card** and fill out the following form indicating whether its items are suitable or unsuitable.

Your notes and responses will be highly appreciated and confidential, so please have a look at the **Observation Card** sheet and note down your opinion on:

1- The clarity of the items.
2- The suitability of the **Observation Card** .
3- The belonging of each item to its domain.
4- The deletion or addition of items.

Any further comments will be highly appreciated.

_____
_____
_____
_____

Thanks a lot for your cooperation

Researcher/

Amal Muhammed Abu Sharar

Supervised by/

Dr. Sadek Firwana

A checklist(Observation Card) for an Action Research Plan applied by English Language Teachers

		(5)	(4)	(3)	(2)	(1)
FOCUS						
1	States the problem clearly.					
2	Is answerable and under the teacher's influence.					
3	Is closely linked to the students' learning.					
4	Is of interest and worth the time and the effort that will be spent .					
RATIONALE						
5	Clearly and specifically makes a case for inquiry study, identifying benefits for students and teachers' professional development.					
6	Explains why the teacher researcher will take the actions s/he selected.					
7	Explains why data needs to be collected and analyzed to build up an action research plan.					
ACTIONS						
8	Are specifically and accurately described with reference to who is involved and how the actions will be carried out.					
9	Identify precisely the role of the teacher and the students.					
QUESTIONS						
10	Are narrow enough to be successfully addressed.					
11	Reveal the focus and connect to the					

		(5)	(4)	(3)	(2)	(1)
	rationale for the study.					
12	Include the actions being chosen.					
13	Are open-ended.					
14	Provide a guide for data collection and analysis.					
15	Are flexible; can be modified and adjusted.					
DATA COLLECTION TECHNIQUES						
16	Include triangulation of sources.					
17	Will provide the necessary information needed to answer the research question.					
18	Are manageable in terms of types and numbers.					
ACTION MEETINGS AGENDA (FOCUS GROUP)						
19	Includes clear protocol/agenda for the group work.					
20	Connects action plans to inquiry questions.					
21	Provides a chance to promote the plans and exchange experiences .					
22	Includes strategies for documenting the group actions throughout the inquiry period.					

Appendix (4)

The Islamic University – Gaza

Scientific Research Affairs

Faculty of Education

Department of Curriculum and Instruction

An Invitation to Referee a Focus Group Protocol

Dear referee/……

The researcher is conducting a study entitled "**The Effectiveness of an Action Research-Based Program in Improving In-service Teachers` Techniques in Teaching English**" to obtain the Master's Degree in curriculum and instruction.

To achieve the study objectives, the researcher has designed a focus group protocol to enable the study teacher participants to reflect on their action research experience, derive their theories out of their practice and exchange ideas concerning the effectiveness of their intervention plans.

Because of the importance of your opinion and experience, you are kindly invited to referee the attached focus group protocol, and I would be so grateful for your comments on the protocol suitability, relevance, linguistic correctness and the importance of each question.

All your contributions are highly valued. If you have any comments, please write them down in the space below.

_____

_____

_____

_____

Thanks for your kind help and cooperation

The Researcher/

Amal Muhammed Abu Sharar

The Supervisor/

Dr. sadek Firwana

Focus Group Protocol

1. a. After being involved in the action research experience, will it continue to be part of your practice?
   b. What factors or conditions contributed to your decision to make action research a continued part of your practice?
   c. What factors or conditions contributed to your decision not to make action research a continued part of your practice?
2. a. I am interested in knowing about the differences you see in yourself as to how you make decisions about instruction.
   b. Talk to me about your professional growth in the past year.
3. Do you feel that action research has contributed to making the teaching-learning process more effective? If so, how? If not, why not?
4. What were some of the major difficulties faced while implementing action research in your classes? What did you do in order to overcome them?
5. Do you think that action research bridged the gap between the theory and practice of teaching? If so, how? If not, why not?
6. Did action research help you gain a better perspective into your own teaching and the students' learning? If so, how? If not, why not?
7. Did your involvement in the action research workshops allow you to learn from other people's experiences and share your experience with them? If so, how? If not, why not?
8. Would you recommend action research to your colleagues? If so, why? If not, why not?
9. Tell me about the things that you have done in the past month that will affect student learning.
10. You've decided to focus on a specific issue for your action research project.
    a. What was that issue?
    b. What kinds of data did you gather about this issue?
    c. What steps and tools did you use to gather such data?
    d. How did the gathered data help you to deal with the issue?
    e. Were the results of your action research project satisfactory? If so, why? If not, why not?
11. In a few words ,sum up your overall impressions of your action research experience?
12. Is there a question that I did not ask, that you think I should have asked?

Thank you

Appendix (5)

The Islamic University – Gaza

Scientific Research Affairs

Faculty of Education

Department of Curriculum and Instruction

Refereeing Action Research diaries

Dear Professor, Supervisor, Expert teacher,……

The researcher is conducting a study entitled "**The Effectiveness of an Action Research-Based Program in Improving In-service Teachers` Techniques in Teaching English"** to obtain the Master's Degree in curriculum and instruction.

One of the requirements of this study is to collect data from teacher researchers using an action research diary. You are kindly requested to look carefully at the attached diary sheet and fill out the following form indicating whether the items of the diaries are suitable or unsuitable.

Your notes and responses will be highly appreciated and confidential, so please have a look at the diaries sheet and note down your opinion on:

4- The clarity of the items.
5- The suitability of the diary and its sufficiency to document an action research plan.
6- The deletion or addition of items.

Any further comments will be highly appreciated.

_____
_____
_____
_____

Thanks a lot for your cooperation

Prepared by Researcher/

Amal Muhammed Abu Sharar

Supervised by/ Dr. Sadek Firwana

Teachers Diary of Action Research

1. What is happening here?

2. What are my perceptions/attitudes about what is happening?

3. What are my responses to/interpretations of what has happened?

4. What meanings can I make about these happenings?

5. What happened in sequence over my teaching day/week?

6. What and who influenced my development as a teacher and my teaching philosophy?

Appendix (6)

Referee Committee

1. Achievement Test 2. Questionnaire 3. Observation Card 4.Focus Group 5. Diaries

No	Name	Field	Institute	1	2	3	4	5
1	Prof. Hassan Abu Jarad	English Department	AL Azhar University	√	√	√	√	√
2	Dr. Abdallah Kurraz	English Department	AL Azhar University		√	√	√	√
3	Dr. Muhammad Atteya	English Department	Al Aqsa University	√	√	√	√	√
4	Dr. Shawqi Ghannam	English Department	Al Aqsa University	√	√		√	
5	Dr. Khalid Abdel Qader	Faculty of Education	Al Aqsa University		√	√	√	√
6	Mr. Muhammad Sharaf	Faculty of Education	Al Aqsa University	√	√			√
7	Dr. Jaber Al Ashqar	Faculty of Education	Al Aqsa University		√	√	√	
8	Prof. Awad Qeshta	English Department	Islamic University	√	√	√	√	√
9	Prof. Abdel Mu'ti Al Agha	Faculty of Education	Islamic University	√	√	√	√	√
10	Dr. Muhammad Hamdan	Faculty of Education	Gaza University	√	√	√	√	√
11	Prof. Suheil Diab	English Department	Gaza University	√	√	√	√	√
12	Dr. Abd Elkareem Almadhoun	Dean of Postgraduate Studies and Research	Palestine University	√	√	√	√	√
13	Dr. Ophira Gamliel	South Asian Studies	Ruhr-University Bochum	√	√	√	√	√
14	Mr. Nasser Al Sdoudi	Technical Director	Middle Directorate Of Education	√	√	√	√	√
15	Mr. Kamal Abu Shamla	English supervisor	Middle Directorate Of Education	√	√	√	√	√
16	Mr. Mustafa Abu attwan	English supervisor	Middle Directorate Of Education	√	√	√		
17	Mr. Kamel abu Shamla	English supervisor	UNRWA schools	√	√	√	√	√
18	Mr. Majed Salah	English supervisor	East Khan Yunis Directorate Of Education	√	√	√	√	√
19	MR. Riyadh al Farra	English supervisor	East Khan Yunis Directorate Of Education	√	√	√	√	√
20	Mr. Muhammad Abu Nada	English supervisor	Rafah Directorate Of Education	√	√	√	√	√
21	Mrs. Najat Nasr	English supervisor	Rafah Directorate Of Education	√	√	√	√	√
22	Mrs. Maysoon al Nazli	Teacher	Sabra and Shateela school	√	√	√	√	√
23	Mrs. Fatenak Al Kefafi	Teacher	Sabra and Shateela school	√	√	√	√	√