

Ministry of Higher Education and Scientific Research

University of Algiers 2 “Abu El Kacem Saadallah”

Faculty of Foreign Languages-Department of English



**Investigating Teacher Development through Exploratory Practice
in Algerian Secondary Education EFL Classes**

The Case of English Language Teachers of Bouira

A Dissertation Submitted in partial fulfilment of the requirements for the Degree of
Magister in Linguistics and Didactics: Cross-cultural Studies of the Language and
Social Didactics

Presented by:

Ms. Imane BOUKERROU

Supervised by:

Prof. Zoulikha BENSAFI

June 2017

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Declaration

I hereby declare that the substance of this dissertation is entirely the result of my investigation and that due reference or acknowledgement is made, whenever necessary, to the work of other researchers. I am duly informed that any person practising plagiarism will be subject to disciplinary action issued by the University Authorities and the rules and regulations in force.

Date:

Signed:

Ms. Imane BOUKERROU

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It is a pleasure to thank all the people who made this study possible.

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Last but not least, my fiancé Dr. Amine ARROUM should exclusively be addressed with most of gratefulness and recognition for his love, care and patience experiencing with me all the ups and downs of this research.

Dedication

-For my patient parents; thanks for your unconditional love

-For my fiancé; thanks for being with me every step of the way

-For my kind aunt Ouardia

- For all my big family

-For all my colleagues and friends

Abstract

This study fits in the area of L2 classroom research. It attempted to address the topic of teacher-research through the framework of Exploratory Practice for teacher development in Algerian Secondary School EFL classrooms. The study had two main objectives (1) examining the significance of EP as an approach to teachers' PD in addition to exploring the constraints encountered by the informants during their EP experiences; and (2) exploring the sustainability of doing EP over long timeframe and the factors that influenced it. Our investigation adopted a qualitative case study paradigm, thus, two qualitative research tools (semi-structured interviews and open ended questionnaires) were utilized to collect data from four teachers of English language at two different Secondary Schools in the area of Bouira. The study ran for five months consisting of the first and the second semesters of the academic year 2015/2016. All our informants participated in an EP workshop/training before they could embark on the EP project. The necessity of organizing an EP workshop/training might be justified by the fact that all our participants were unfamiliar with the concept of teacher-research when they accepted to take part in this study. The EP workshop/training, then, served to familiarize them with the concept of EP, thus, increase the reliability of the whole EP study. Thematic analysis seems to indicate that teachers' engagement in EP had a positive effect on their PD impacting their awareness, teaching practice, their assumptions and beliefs as well as renewed their sense of collegiality and gave them reason to collaborate for. EP also proved to provide teachers with ownership and autonomy of their own PD and was perceived as a contextualized approach for professional development as it was integrated in their teaching and not practiced apart of it. However, doing EP was not an easy process; our participants encountered some challenges along their ways of becoming teacher-researchers. The most notable obstacles were: lack of time, lack of research skills, lack of school support in addition to some classroom-based obstacles. The findings also showed that 3 of 4 teachers continued doing EP after the first experience while one teacher gave up practicing EP giving: low self-motivation, lack of external support and having to do other EP experiences individually as main reasons for her early withdrawal from the EP project. Recommendations are offered to discuss the possibility of implementing a teacher-research perspective for English teachers' PD at Algerian Secondary Schools which were provided by the participants in the light of their personal EP experiences.

KEY WORDS: Teacher Development, Teacher Research, Exploratory Practice

List of Abbreviations

- AATE:** Algerian Association of Teachers of English
- ABA:** Action Based Approach
- AR:** Action Research
- CPD:** Continuing Professional Development
- CAR:** Classroom Action Research
- ENS:** Ecole Normale Superieur
- EFL:** English as a Foreign Language
- EP:** Exploratory Practice
- ELT:** English Language Teaching
- ICTs :** Information and Communication Technologies
- PD:** Professional Development
- PES:** Professeur de L'Enseignement Secondaire
- RT:** Reflective Teaching
- RP:** Reflective Practice
- RQ:** Research Question
- SLA:** Second Language Acquisition
- TESOL:** Teaching English to Speakers of Other Languages
- TT:** Teacher Training
- TE:** Teacher Education
- TD:** Teacher Development
- TA:** Teacher A
- TB:** Teacher B
- TC:** Teacher C
- TD:** Teacher D

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General Introduction

General Introduction

Seemingly, the Algerian Ministry of Education is increasingly challenged to provide teachers with high quality professional development activities. This has become a necessity nowadays because of the reform introduced in 2002 in both Middle and Secondary Schools which consist of the new launched approach ‘the competency-based approach’, which is learner, centered which thought to better fit globalization.

These professional development activities consist of district-wide seminars organized every year by Inspectors of Education for the professional preparation of teachers including all aspects of teacher development. Unfortunately, these seminars do not seem to be sufficient for the professional learning of teachers. The situation triggered an investigation of this critical issue. This general introduction opens by stating the main issue investigated and presents the background to the study. Then, it provides the rationale of the research which describes the importance of our topic which makes the study worthy of research. The following section introduces the purpose and significance of the investigation as well as the research questions. Finally, the outline of the present dissertation is described.

Statement of the Problem

English language teachers in the different secondary schools of the district of Bouira informally complain about the efficiency of the professional development activities in which they are engaged every year by their academy of education. These complaints are consistent with the researcher’s observation both of her school colleagues and of other English teachers working in the different secondary schools of the district while meeting in the district-wide seminars organized by the inspector during her 3 years teaching. For greater reliability, the researcher designed a questionnaire to gather empirical data from 50 English teachers working in the different Secondary Schools of the district of Bouira to know their perceptions towards their professional development programmes.

Method

The preliminary questionnaire used at this stage of the research included 11 close-ended questions. Based on the complaints of teachers as well as on international review of literature about teacher professional development, a pool of statements reflecting distinct themes of professional development of teachers was developed by the researcher. In the questionnaire, these statements were presented in the form of items for teachers to comment on a four-point Likert-type scale, ranging from “strongly agree” to “strongly disagree”. In addition to that, in the first section of the questionnaire, a range of professional development activities were selected from the literature, and presented on a five-point Likert-type scale ranging from “never” to “always” to find out in which of them teachers are engaged and how often they are engaged in these activities. The data collected through the questionnaires were analyzed descriptively. All responses to the closed-ended items of the questionnaire were entered for computer analysis using (SPSS, version 17) and descriptive analyses were made for these items.

Prior to the analysis, each questionnaire was carefully edited and coded. The values of the Likert scale were coded with 1 being ‘Strongly Disagree’; 2 ‘Disagree’; 3 ‘Agree’; 4 ‘Strongly Agree’. (see appendix1, p 129)

Design

The survey had 2 sections; section 1 focuses the PD programmes that the teachers who participated in the questionnaire are engaged in and the frequency of these programmes during the school year. Section 2 collects data about the teachers’ perceptions towards the PD programmes in which they are currently participating. Questions 3 and 4 are concerned with teachers’ participation in their current PD programmes. Questions 5, 6 and 7 are related to the PD programmes and the teachers’ practice and teaching context. Question 8 gathers teachers’ perceptions about the impact of PD programmes on learners. Question 9 relates to the PD programmes and the transferability of knowledge to the classroom. Question 10 is about PD programmes and teachers’ reflection on their practice. Finally question 11 is concerned with a general opinion of teachers about the sufficiency of their PD programmes for their own PD. Qualifications, experience and information on gender, for example, were not requested

as there was no reason to hypothesise that this might be a relevant factor influencing their perceptions.

Administration

The questionnaires were distributed to the teachers on the 5th of January, 2016 during a seminar. The teachers filled in the questionnaire during that meeting. A total of 40 questionnaires were returned on the same day, five of which were unusable. Therefore, 35 usable questionnaires were received. In order to reach 50 answered questionnaires, 30 other ones were distributed in some Secondary Schools on the next week. 15 questionnaires were returned which were all answered.

Results

Charts (1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11) below show findings related to the questions in the scale we have used. This scale was designed to explore teachers' attitudes to their PD programmes. The findings of this scale are shown through sorting out the items individually; this is because every item is considered important in serving the objectives of the questionnaire. It is worth noting that this analysis focuses on percentages because the objective was not to calculate responses but to use them in determining 'proportions' of participants responding to each item of the questionnaire.

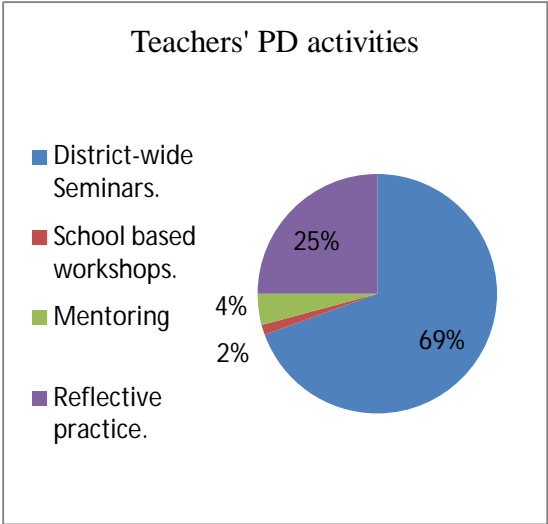


Chart.1

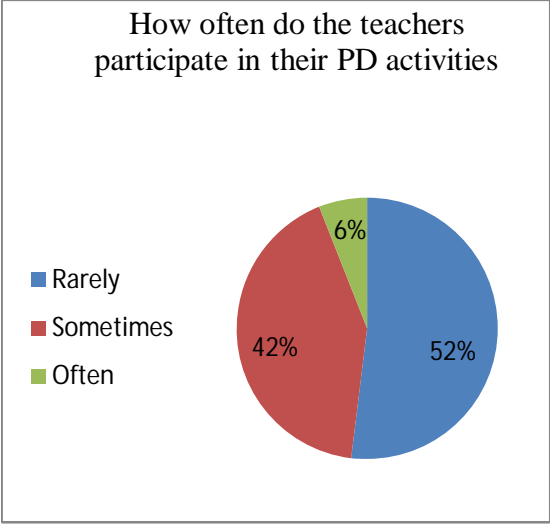


Chart.2

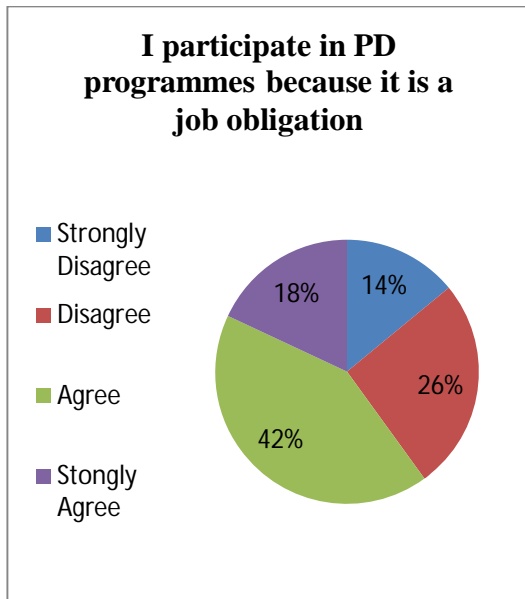


Chart.3

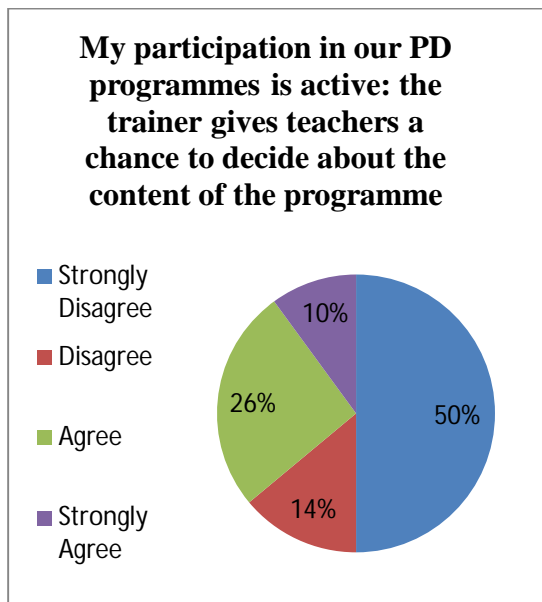


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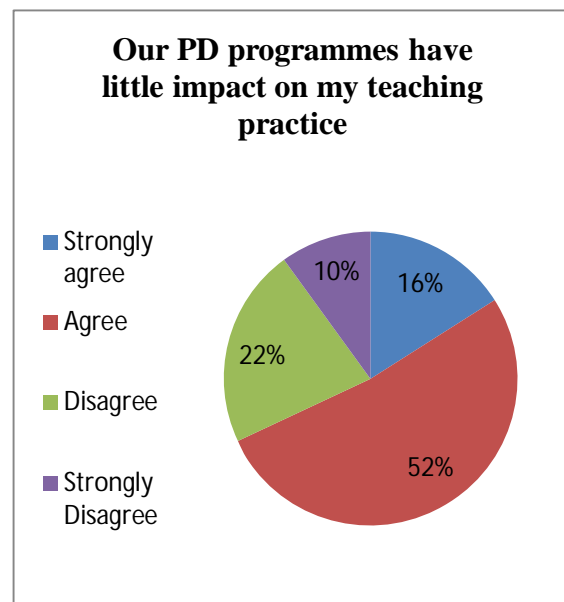


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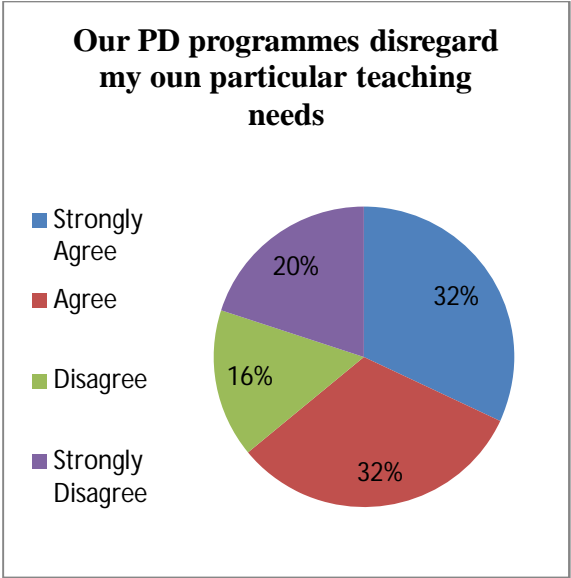


Chart.6

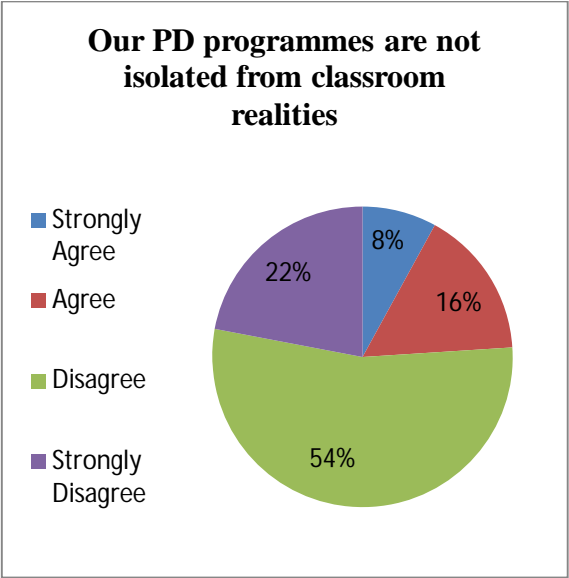


Chart.7

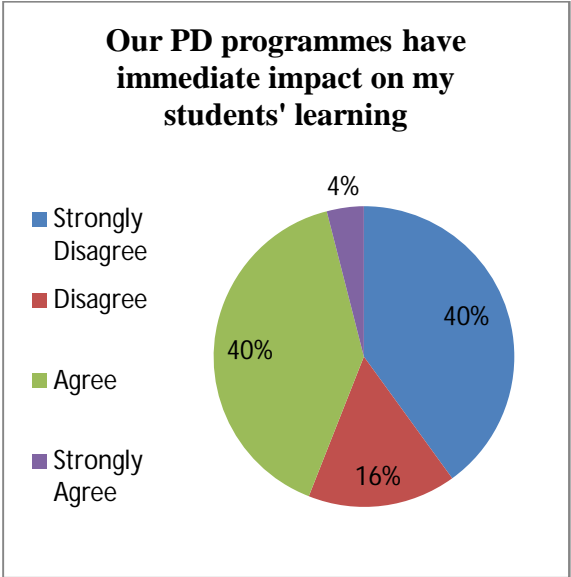


Chart.8

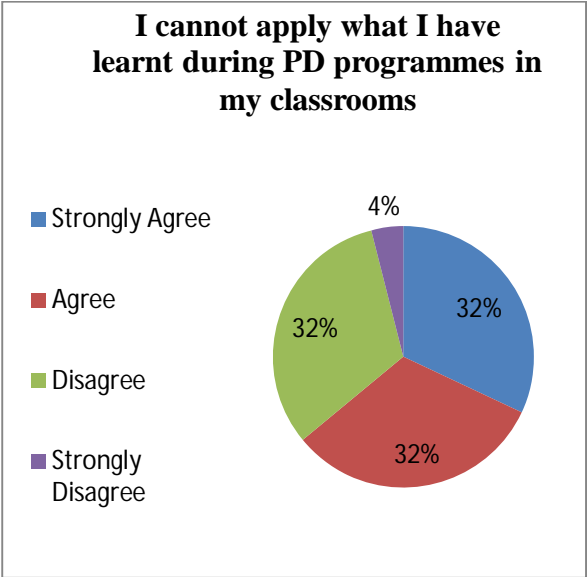


Chart.9

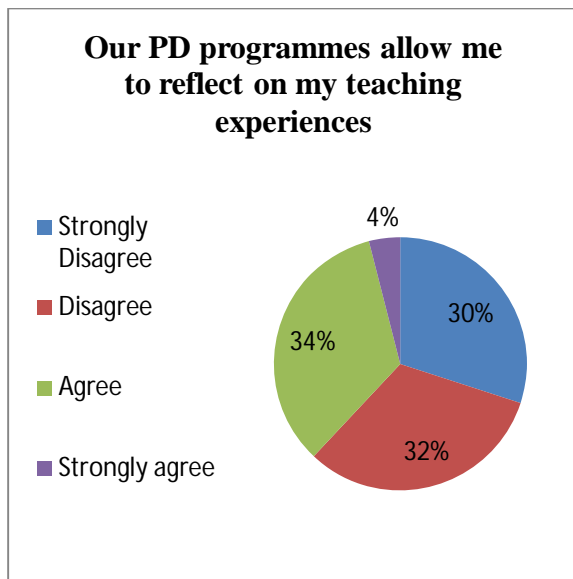


Chart.10

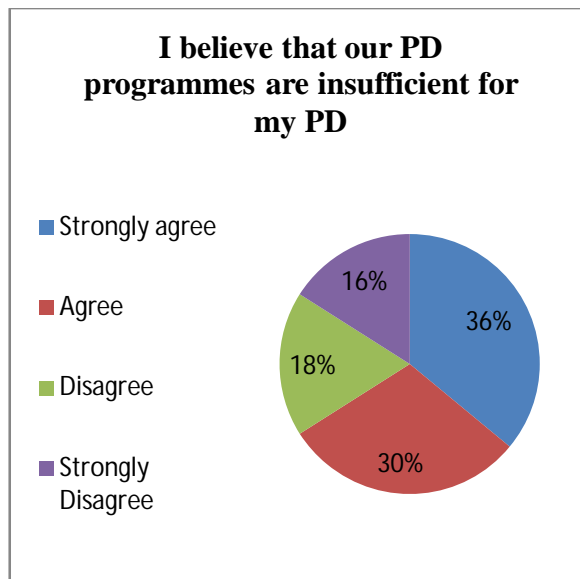


Chart.11

Chart 1 shows that the majority of the teachers who answered the preliminary questionnaire (69 %) participate in district-wide seminars as PD programmes and only 25 % of them mentioned that they do reflective practice, while none of the teachers mentioned that they do classroom-based research for their PD. This might indicate that the type of PD that is most practised by the teachers is traditional workshop-based.

Although teachers are believed to have gained many benefits from their participation in professional development programmes. The literature of professional development is filled with descriptions of past failures (Guskey, 2000). One of the most concerning issues described is the negative perceptions amongst teachers who viewed professional development as “something that they must endure and get out of the way” (Guskey, 2000, p. 15). Educators themselves frequently regard professional development as having little impact on their day-to-day responsibilities. Some even consider it a waste of their professional time; they participate in professional development primarily because of contractual obligations (ibid). This perception rings true with the teachers who participated in this preliminary questionnaire as the majority of them (42% agree, 18% strongly agree), which gives a total of 60% of agreement with the fact that their participation in PD programmes is not free since it is not initiated by them (see chart 3). Many teachers and school administrators regard professional development as special events (one-shot workshops) that are restricted to 3, or 4 days during the school year (Guskey, 2000), this perception of PD also rings true in the

teachers' responses to question 2 (how often do the teachers participate in their PD programmes?), 52 % of the teachers mentioned that they rarely participate in professional development programmes and 42 % said that they sometimes participate in PD programmes. (see chart 2).

Moreover, in the preliminary questionnaire, 50 % of the teachers strongly disagree and 14 % of them disagree with the statement: 'my participation in the PD programmes is active; the trainer gives teachers a chance to decide about the content of the programme' which means that the majority of the teachers think that they play a passive role during their participation in their PD programmes, a fact which can make teachers' participation in professional development ineffective as Fullan (1995) contends that one-shot workshops are ineffective as the topics are selected by the people in-charge of the workshop instead of the teachers. (see chart 4).

Additionally, research does indicate that the more traditional in-services courses such as "brief one-shot workshop without follow up", do not provide enough time, activities, or content to develop teachers' knowledge or affect their practices (Porter et al 2003), in line with this, the majority of the teachers who answered the preliminary questionnaire (52 % of the teachers agree and 16 % strongly agree) with the fact that their PD programmes have little impact on their teaching practice. (see chart 5).

Furthermore, 64 % of the teachers agreed that their PD programmes disregard their own specific needs (see chart 6), As most teachers are not usually consulted of their professional development needs in traditional PD, they might perceive their professional development experience to be as extraneous to the improvement of their teaching practice. Many conventional forms of professional development are seen as too top-down and too isolated from school and classroom realities (Guskey, 2000), the majority of teachers in the preliminary questionnaire seem to agree with Guskey's claim as 76 % of them disagreed with the statement that their PD are not isolated from classroom realities. (see chart 7).

As far as the impact of the PD programmes on students' learning, only 44 % of the teachers agree that their PD programmes have immediate impact on their students'

learning, whereas the majority (56 %) believe that their PD programmes do not have immediate impact on their students' learning. In this respect, Gabriel Diaz-Maggioli (2004) claims that professional development as we have known it for years now has yielded little or no positive effects on student learning. (see chart 8).

Guskey (2000) argues that it is difficult for the teachers to incorporate the knowledge and skills gained from the professional development experienced into their practice as the reforms intended, in agreement with this, 64 % of the teachers think that they cannot apply what they have learnt during their PD programmes in their classrooms. (see chart 9). Additionally, 62 % of the teachers believe that their PD programmes do not allow them to reflect on their teaching experiences, thus, the majority of teachers do not seem to be practising reflection during conventional PD programmes (see chart 10). Finally, 66 % of the teachers believe that their PD programmes are not sufficient for their professional development (see chart 11).

As a consequence of the previous results and as a reaction to traditional professional development, this research study tries to look at the potential of Exploratory Practice as an inclusive, reflective and inquiry-based approach for teachers' professional development which is practiced and initiated by the teachers themselves in their classrooms focusing on their and their learners' needs and problems as the integration of teacher-research into teacher education (pre-service and in-service) seems to be quite timely and is likely to have high impact on English language education and teacher development at large.

Rationale of the Research

Two major objectives were put forward for this study; the first objective was to explore the significance of EP (Exploratory Practice) as an approach for teachers' development and the constraints encountered by the participants during its implication in Algerian Secondary School EFL classrooms, while the second objective was to explore the longer commitment of our participants to doing EP for their PD. The following text will spell out the motives behind addressing these objectives.

In fact, the researcher's interest in addressing the topic of EP as an approach to teachers' professional development in Algerian Secondary School EFL classrooms was

driven by two major motives. One motive was personal, related to personal interests in the area of didactics in general, and in the domain of teacher-research in a narrower sense.

The personal motive, then, was the researcher's interest in exploring Exploratory Practice as a potential tool to enhance teachers' professional development; this might be explained as follows:

First, the researcher's interest has been driven from the courses that she had received during the 1st year of Post-Graduation; the positive benefits of teacher research in general and of Exploratory Practice as a specific form of teacher research for teachers became clearer for the researcher when she took some courses related to Social dynamics of the language classroom while completing my Magister in Didactic studies at Bouzareah University (English Department) in 2014. Most of the coursework she attended during this seminar related to teachers' professional development during which she learned that teachers should continuously be involved in reflection to develop their personal growth. One of the tools that potentially enhances this capacity is by engaging in a teacher research projects.

The second reason for the researcher's interest in EP arises from teachers' complaints that the seminars, being the only programme of professional development for the majority of teachers are not enough to help them in their professional growth. This motive was strengthened by the researcher's profession itself, although she has been teaching English in Algerian Secondary School for only three years, the topic of professional development was one of the key issues which were highly emphasized by Inspectors during their visits to classrooms and during the seminars too, especially with the new didactic ideas and concepts which were introduced to the Algerian educational system in 2002 to follow international educational norms. These are concepts such as reflective professional development, collaborative or cooperative teacher learning and communities of practice, evidence-based practice, among others. It became clear that an immediate response could be to introduce a form of practitioner research which may help teachers in their professional development and assist in establishing a culture of professional development that is based on research and inquiry. EP as a form of practitioner research then was not a frequent concept in the Secondary Schools where

the researcher was teaching, nevertheless it is supposed that it is probably high time this approach required special attention at Algerian Secondary Schools.

The professional motive of this study, however, was developed after reading literature by Allwright and Hanks (2009), Borg (2013), Dikilitas (2015). Limited readings of the researcher gave her the impression that something of value could be added to the bulk of research about the concept of teacher development through teacher-research projects, at least from an Algerian context, as no studies about Algerian teacher-research in general and Exploratory Practice projects in a narrower sense seem to have been conducted so far. Additionally, the works of Cochran-Smith and Lytle and Slimani-Rolls in the field of teacher-research and of Guskey in the field of professional development have prompted the researcher's desire to investigate the engagement of our teachers in teacher-research projects and find out to what extent this practice might be beneficial for their professional development.

Purpose of the Research

In the light of teachers' need for contemporary language teacher development programmes that give primacy to modes of teacher reflection, the objective of this study is to evaluate the significance of EP as an approach to teacher development in the context of ELT at two Secondary Schools in the area of Bouira (Louni Messaoud and Abd Rahman Mira Schools). This purpose was achieved by conducting an EP project at these schools, in which teacher-participants, including the researcher, engaged in EP in their classrooms during the second and third term of the academic year 2015/2016.

The EP project aimed at discovering how a group of 4 teachers applied the principles of EP in their classroom pedagogy, and the effect of EP on their professional development. The project aimed at firstly, facilitate and develop the culture of research and inquiry among the participants; secondly, develop an approach to teacher development in the form of practitioner research, which may be practical without causing burn out and thirdly at understanding the effects of EP on the teachers' professional development.

Significance of the Study

This study was expected to produce valuable information to all those involved in teacher development such as teachers, policy makers, teacher educators and schools. The significance to each of these groups is broadly explained below:

- a. For teachers, this bit of enlightenment might benefit teachers know the extent to which doing teacher-research would be a fundamental pattern of their teaching practices. Thus, it might be a good opportunity for them to try EP in their classrooms and decide whether or not it can benefit their PD.
- b. For policy makers (such as the Algerian Ministry of Education, Teacher Educators (Inspectors in Algeria), this study might provide useful information from teachers' perspectives on how to run effective professional development programmes for teachers as well as how to provide support for teachers who might intend to engage in teacher-research.
- c. For school communities (such as principals and colleagues), the study might provide valuable information about how to conduct EP as well as how to support teachers to continuously do it as part of their practice and as an approach to their professional development based on the modest experiences of our participants.

In sum, the findings of this study were expected to be a source of illumination about the significance and the effects of Exploratory Practice as a particular approach of teacher-research on teachers' professional development in Algerian context.

Research Questions

This study seeks to achieve its purpose by evaluating the effectiveness of the EP project carried out at two Secondary Schools in the area of Bouira. The effectiveness of EP was measured on its significance as an approach to teacher development; here barriers that the teachers encountered during their engagement in EP as well as the sustainability of the practice were also investigated.

Question 1

What do teachers consider to be the benefits of EP for their professional development?

Question 2

What constraints, if any, did teachers encounter in conducting their EP project?

Question 3

The third RQ in this study is divided into two parts. The first part simply tries to know who among the four teachers who participated in this study engaged in other EP experiences and who withdrew from the EP project. The second part is related to understating the reasons that influenced teachers' decisions about engaging, or not, in further EP experiences.

Part one: Did teachers who participated in the EP pilot continue to employ it as a tool for their professional development?

Part two: What reasons do these teachers offer as to why they do or do not still do EP?

Outline of the Dissertation

Now we turn to present the outline of this dissertation. Four chapters build up the whole body of this study.

Our dissertation is divided into four chapters. It first starts with an introductory section, which outlines the study and provides the rationale for this research, its purpose, significance and questions.

The First chapter provides theoretical backgrounds underlying the concepts of teacher development and teacher research with a specific focus on Exploratory Practice. This chapter will initially focus on research areas that have used the terms: “teacher development”, “teacher training” and “teacher education”, to find out how these terms have been defined, thus highlight what we mean by “teacher development” in this study. It also aims at explaining and describing the new paradigm of teacher development as

opposed to the traditional one-shot, top down approach. Next, it engages in a comparative study of approaches to teacher development based on reflection and inquiry analyzing the use of teacher-research in the field of teacher development with special reference to Exploratory Practice as a form of practitioner research.

Chapter 2 spells out the research epistemology and methodology used for this study. It also explores the research instruments used for data collection. The research instruments chosen for this research study are individual face-to face semi structured interviews and open-ended questionnaires. Details regarding the methods chosen, data analysis procedures, reliability and validity of data collected and the ethical consideration involved are explained further in this chapter which also describes the background of the research participants.

Chapter 3 presents the findings of the study from the interviews and questionnaires in terms of their presentation, interpretation and discussion. The analysis of data gathered from these two instruments was not presented separately as both of our data collection tools are qualitative. This chapter also describes the EP workshop as well as the first EP experience in which the 4 teachers in this study participated. Here, a description of how our teacher-research project was introduced to the participants who had no prior teacher-research engagements in their teaching careers. Just telling the teachers about Exploratory Practice and giving them articles to read during their free time before their engagement in it was supposed to influence the reliability of the whole EP project, therefore, the inclusion of an EP workshop explaining how our informants learnt about EP was deemed necessary.

The dissertation ends with the bibliography and an appendices section.

Definition of Terms

The following terms which are used frequently in this dissertation will have the following definitions:

a. Teacher Professional Development

Professional Development, in a broad sense, refers to the development of a person in his or her professional role. More specifically, “Teacher Development is the professional growth a teacher achieves as a result of gaining increased experience and examining his or her teaching systematically” (Glatthorn, 1995, as cited in Villegas-Reimers, E., 2003, p.41).

As the terms of Teacher Development, Professional Development, Teacher Training and Teacher Education might be overlapping, the difference between them will be discussed in the chapter of literature review.

b. Practitioner Research

A working definition of Practitioner Research that is used in our dissertation is: “practitioners (teachers, teacher educators, learners, etc.) conducting purposeful, systematic, ethical, and critical enquiries into their own practices, in their own contexts, with the aim of extending understanding(s) of educational processes and human behavior (Hanks, 2017, P.41)

c. Teacher Research

The term ‘Teacher Research’ in this study means: “...systematic and intentional inquiry carried out by teachers...” (Cochran-Smith and Lytle, 1993, P.7)

d. Exploratory Practice

“...Exploratory Practice is essentially a way for teachers and learners to work together to understand aspects of their classroom practice that puzzle them through the use of normal pedagogic procedures (standard monitoring, teaching and learning activities) as investigative tools (Hanks, 2017, P.41)

CHAPTER ONE

Critical Review of the Literature

Introduction

The aim of this study is to find an approach to teacher development in the form of practitioner research that may be practicable and ongoing without burnout in the Algerian context of Secondary Education. Thus, the literature review focuses on the forms of practitioner research employed as professional development approaches in the field of TESOL. The search of literature brought forth three main approaches: Action Research, Reflective Practice and Exploratory Practice in the context of TESOL Teacher Education. Out of the three approaches, two are forms of practitioner research: Action Research and Exploratory Practice. Keeping in view the aims of the project, EP is considered a more suitable approach than Action Research because it utilizes routine teaching activities as tools of data collection instead of employing academic research tools. It also prefers understanding quality of life in a language classroom instead of solving problems.

This chapter starts with defining key terms used in the field of TESOL Teacher Education to highlight what we mean by teacher development. Then, it mentions teacher development models based on reflection and inquiry and provides a comparative study of Action Research, Reflective Practice and Exploratory Practice models.

Afterwards, it moves to define and highlight the origins of teacher research, it also points out the benefits of teacher research to professional development.

Subsequently, it offers a special reference to EP as a form of practitioner research, highlighting its development and principles. The chapter ends up with a brief conclusion.

1. Review of literature on Professional Development

This section will discuss overlapping concepts related to the term Professional development, it will also review the changing paradigm of teacher professional development and compare between the reflective, inquiry-based approaches to PD.

1.1. Teacher training (TT), Teacher Education (TE) and Teacher Development (TD)

We find it helpful at this stage to distinguish conceptually between three notions that seem often to be taken as all coming under the cover term of “education”. These are: “teacher education”, “teacher training” and “teacher development”. In this section we shall define and differentiate between these terms so as to be clear about what we mean by ‘teacher development’ in this dissertation.

Training, according to (Widdowson, 1983; Richards and Nunan, 1990, as cited in Mathew, R, 2014) deals with familiarising student teachers with techniques and skills to apply in the classroom whereas education involves teachers in ‘developing theories of teaching, understanding the nature of teacher decision making and strategies for self-awareness and self-evaluation...’ (Richards and Nunan, 1990 as cited in Mathew, R, 2014). Johnson (2009:17) argues that at its core, L2 teacher education is primarily concerned with teachers as learners of teaching. TT is one-off, usually short-term and compulsory for getting a job. On the other hand, TD is seen to be a voluntary process, ongoing, bottom-up, since the starting point is the teachers’ own experience where new information is sought, shared, reflected on, tried out, processed in terms of personal experience and finally ‘owned’ by the teachers. (ibid).

1.2. The traditional paradigm of teacher PD

Traditionally, many teachers and school administrators regard professional development as special events that are restricted to 3 or 4 days during the school year. Seldom have they had input into the planning of these events, and only rarely are the ideas that are offered directly applicable to their situation (Guskey, 2000). In agreement with Guskey, Cooley (1997 as cited in Guskey, 2000) argues that many conventional forms of professional development are seen as too top-down and too isolated from classroom realities to have much impact on practice and that they tend to be highly visible at the surface, but do not affect what’s going on down in the lower depths. Criticizing traditional approaches to teachers’ professional development which mainly consist of in-service workshops and seminars, Guskey, 2000 further argues that teachers participate in these professional development programmes because of contractual

obligations but often see them as something they must “get out of the way” so that they can get back to the important work of educating students.

In accordance with Guskey, Gabriel Diaz-Maggioli (2004, pp. 2, 3) nicely sums up the characteristics of traditional professional development practices in the following important stumbling blocks:

- **Top-down decision making:** traditionally, professional development arrangements are made by administrators and consultants rather than teachers, muffling the teachers’ voices and placing priority on administrative needs.
- **Lack of ownership of the professional development process:** given that teachers’ voices are not generally heeded during PD, they rightly question their investment in programs that were built behind their backs yet are aimed at changing the way they do things.
- **The technocratic nature of professional development content:** More often than not, teachers in traditional professional development programs are taught techniques that they are expected to replicate in the classroom, however, in attempting to transfer these practices into their classrooms, teachers need to invest considerably more effort than the professional development planners originally anticipated.
- **Standardized approaches to PD that disregard the varied needs and experiences of teachers:** the standardized nature of traditional PD programs assume that all teachers should perform at the same level, regardless of their particular experiences and needs.

Nevertheless, Guskey (2000) claims that it is not the case, therefore, that all professional development in education is ineffective, meaningless, and wasteful. Rather, educators simply have not done a very good job of documenting the positive effects of professional development, nor of describing precisely which aspects of professional development most contribute to its effectiveness.

Our vision of teacher professional development in this study tries to challenge the characteristics of traditional forms of PD and is grounded in faith in teacher-research as an unconventional approach which fits the demands of the new paradigm of teacher professional development. This latter will be discussed in the following section:

1.3. New PD paradigm: Reflective, Inquiry-based approaches to professional development

While postsecondary coursework, professional workshops, and educational seminars will most certainly continue to play an important role in the professional credentialing of L2 teachers, a host of alternative professional development structures that allow for self-directed, collaborative, inquiry-based learning that is directly relevant to teachers' classrooms have begun to emerge. Since the mid-1980s, the RT movement, the predominance of AR and the TR movement have helped to establish the legitimacy of teachers' accounts of their experiences and to recognize the importance of reflection on and inquiry into those experiences as a mechanism for change in teachers' classroom practices as well as a forum for professional development over time (Schon, 1995, Zeichner, 1999), this growing body of research has fostered the popularity of a variety of school-based, practitioner-driven, collaborative, inquiry-based approaches to professional development.

In this sense, Breen (2006 as cited in Soomro, F, 2012,) sums up the existing approaches to teacher's professional development as two types: 'trainability' and 'vernacular pedagogies'. The former type of teachers' professional development entails short training courses largely serving central policy imperatives or teaching resources industry 'up-dating'. In this type, follow-up development is rare.

Among the vernacular pedagogies, Breen (2006 as cited in Soomro, F, 2012) gives special references to three teacher development approaches: Reflective Practice, Action Research, and Exploratory Practice. According to Breen, such approaches help teachers to place greater faith in the wisdom of experientially based practice rather than the traditional knowledge systems that formerly gave it meaning. Breen maintains: "contemporary language teacher development programmes that give primacy to modes of teacher reflection and action research locate practice as the source of understanding and, thereby, the crucible wherein problems may be solved, innovations accommodated and uncertainties reduced" (ibid).

We shall start by defining RP, AR and EP, highlighting their importance in teacher-development, and then critically analyse a comparative study of the three approaches by

arguing the case of EP as a suitable approach to teacher development in the context of this study.

1.3.1. Reflective practice

Here, we would like to define the process of RP and stress its importance in the context of language teacher development. Schön (1983) defines RP as the capacity to reflect on action so as to engage in a process of continuous learning. A key rationale for reflective practice is that experience alone does not necessarily lead to learning; deliberate reflection on experience is essential (Loughran, 2002).

Schön, perhaps the most influential founder of the reflective practice movement, rejected the belief that professional people undertake their work by relying upon the systematic application of scientifically grounded theory and technique (Schön, 1983, 1987). For Schön, the complexities of day-to-day professional work render such reliance inappropriate:

“The problems of real-world practice do not present themselves to practitioners as well-formed structures. Indeed they tend not to present themselves as problems at all but as messy indeterminate situations. (Schön, 1987: 4)

It is precisely such ‘messy indeterminate situations’ in language classrooms and the close consideration and, crucially, the articulation of the ways in which we act in them that exemplify the focus of reflective practice as a mode for professional development. (ibid).

1.3.2. Action Research

Burns (2010, p. 5) defines action research as “a self-reflective, systematic and critical approach to enquiry by participants who are at the same time members of the research community. The aim is to identify problematic situations or issues considered by the participants to be worthy of investigation in order to bring about critically informed changes in practice”. This way, Kemmis, in the same tradition as Schön, proposed action research as a methodical extension of reflective practice (Kemmis, 1985).

Parson and Brown (2002, cited in Mertler, 2009) argue that action research may serve as a means for improving teachers’ problem solving, their attitude to professional

development and school change, as well as enhancing their confidence and professional self-esteem. In addition, Mertler (2009) asserts that action research provides a huge chance for teachers to link their practice with theory, to become more reflective and risk takers. Mertler (2009) believes that these attributes enable teachers to grow professionally through action research.

1.3.3. Exploratory Practice

Partly developed out of a reaction against what were seen as the disproportionate demands of action research as compared to its longer term perceived benefits to the working lives of language teachers, Exploratory Practice was first proposed by Allwright and Bailey (1991) as a means for teachers to confront the kinds of unanticipated ‘puzzles’ in the language classroom that Schön had earlier identified as ‘surprises’ in practice that generated opportunities for reflectively driven experimentation.

Allwright proposes that reflection on classroom work enables teachers, in collaboration with learners, to identify particular puzzles – such as issues in dealing with aspects of language, or adopted working procedures, or the challenges of heterogeneity or size of classes. Subsequent to reflection and before proceeding to undertake action to resolve such puzzles, it is argued that a crucial stage in the process is to achieve a deeper understanding of them. And it is the attainment of a situated understanding of the life of the classroom, not through the time-consuming design and use of conventional research tools and procedures but through everyday classroom activities and practices, that exemplifies the approach. Allwright proposes six design features characterising the kind of on-going professional development that exploratory practice would serve (Allwright, 2000, 2001):

- Joint teacher–learner work towards understanding must precede/be undertaken instead of action for change.
- Such work must not hinder teaching and learning, but rather make a positive contribution to it.
- Whatever is focused upon in exploratory work must be seen to be relevant to those involved – learners in addition to teachers.

- It must be indefinitely sustainable (unlike action research projects) by being integrated into the normal work of teaching and learning.
- It must bring people together – teachers, learners, researchers, etc. – in a productive collegial relationship.
- It must promote the development of understanding among all concerned.

Therefore Exploratory Practice may be seen to go beyond earlier forms of reflective practice and action research in being process oriented, integrated within everyday ways of working rather than something added to it and driven by the local concerns and needs of both teachers and learners. It is distinctive in explicitly resisting performativity and a preoccupation with effectiveness by replacing these with a focus upon teachers' quality of life or professional well-being through the cooperative understanding of everyday puzzles in practice. (Borg, 2006).

1.4. Comparing teacher development approaches

In this section, we shall adopt a comparison that was made by Dikilitas (2015). While conducting teacher –research projects since 2011, Dikilitas (2015) felt that there was a clear distinction and relation between these three forms of PD (RP, AR and EP). To his understanding, exploratory practice is the first step to be taken before any data-based classroom research is carried out. Once classroom issues are understood from different perspectives, then one can reflect on them systematically to gain deeper insight into issues initially highlighted in mutual quest. The ideas are outlined and the issue is clarified for further questioning. Though it seems that this is also a process of researching and analyzing, a more systematic research path should be planned and carried out as in action research, which requires trying out new practices and taking action accordingly, which may in turn promote instructional change (Dikilitas, 2015). Without insightful data collection and analysis, it could be wrong to decide on changes in pedagogy. Thus, Dikilitas proposed an order of the processes of RP, AR, and EP which according to him is: EP+RP+AR, whereas Allwright suggested RP as a first step: RP+EP+AR (Allwright, 2001).

Dikilitas asserts that the data collected and the ideas highlighted could not form a necessary basis for change. (Dikilitas, 2015: 49). Dikilitas also tell us that different forms of research serve different purposes. If the aim is to understand the issues and

enhance quality of life by raising awareness in different aspects of teaching, we can stay at the exploratory practice level. If the aim is to gain further insight into the explored areas of our teaching, Dikilitas then explains that we (teachers) need to start to theorize our ideas/personal experiences more systematically. When the theorized practices inform us that we need more concrete and objective data to ensure instructional or pedagogical change, then we should start to identify the issue properly carrying out researching cycle to take actions or test the findings before we decide on any change. Therefore, Dikilitas (2015) also agrees with Allwright by proposing a long path before changing practices. Exploring and reflecting may be two steps to take before any engagement in research for professional development. The following figure shows how each form of research can support one another and can function as the driving force of the process of researching.



Source: Dikilitas, K; Smith, R; Trotman, W, *Teacher-Researchers in Action* (pp. 47-55). IATEFL, 2-3.

As explained by Dikilitas, the figure symbolizes how the pedagogical issue is developed and deepened into a researchable and answerable focus. The size of each cog varies according to the degree of specificity. In exploratory practice, the issue in question is discussed and explored from a broader perspective, which is narrowed down to a relatively more specific focus in reflective practice, which can be a concrete

experience. Then the reflection experience becomes the specific focus or the problem that could be solved in action research.

2. Literature on Teacher Research and Exploratory Practice

After reviewing essential literature related to teachers' professional development, the following section reviews literature on teacher-research and exploratory practice.

2.1. Origin of practitioner research in education

As highlighted by Hanks (2007), practitioner research grew out of a number of social, political, and philosophical developments. The great political movements which developed during the nineteenth and twentieth centuries (communism, feminism, socialism, civil rights, and other emancipatory movements) are reflected in developments in education. Hanks (2007) claim that as minority groups in society were beginning to express their voices, teachers were developing a sense of the importance of their own experiences in education.

In education, 'practitioner research' is as old as the works of Dewey highlighting the notion of education as a social activity arguing for a more democratic process of learning and teaching ,1938, 1963 (as cited in Hanks, 2017, p:42). In this respect, Dewey argues: "When education is based upon experience and educative experience is seen to be a social process, the situation changes radically. The teacher loses the position of external boss or dictator but takes on that of leader of group activities. (Dewey, 1963, as cited in Hanks, 2017, p 43).

As Dewey's ideas took hold, the emancipatory and highly politicised movements of the 1960s and 1970s both influenced and were influenced by educational researchers such as Stenhouse (1957) who developed notions of empowering teachers to do research themselves, rather than relying on external researchers. Stenhouse, 1975 (as cited in Hanks, 2017, p 43) argued strongly on the notion of teachers as researchers:

“...the long-term improvement of education through the utilization of research and development hinges on the creation of different expectations in the system and the design of new styles of project in harmony with those

expectations. The different expectations will be generated only as schools come to see themselves as research and development institutions rather than clients of research and development agencies.”

In line with all of Dewey and Stenhouse, Freire 1970 (as cited in Hanks, 2017, p 45) crucially suggested that education is not one-directional, but rather a constant flow, back and forth, in a dialogic relationship between people (whatever their role) drawing on, and feeding into, an ongoing, living conversation:

“The role of the educator is not to ‘fill’ the edecatee with ‘knowledge’, technical or otherwise. It is rather to attempt to move towards a new way of thinking in both educator and edecatee, through the dialogical relationships between both. The flow is in both directions” (Freire, 1973, as cite in Hanks, 2017, p 45).

The origin of practitioner research in the field of education was based on an understanding of learners and teachers as human beings in the classroom and as people who have important insights into the learning-teaching process.

2.2. Benefits of teacher research for professional development

It has been argued for many years that educators should conduct research about their own practice as a form of professional development. John Elliott’s pioneering work in the United Kingdom was instrumental in establishing teacher research as an available form of professional development for teachers in many parts of the world. (Elliott, J. 1980, 1991 as cited in Zeichner, K, 2003).

Despite concerns expressed by some over the years that teachers are incapable of conducting research or that research will take time away from that which teachers should be devoting to their students (Hodgkinson, 1957 as cited in Zeichner, K, M, 2003). One of the most common claims is that teachers will become better at what they do by conducting research and that the quality of learning for their pupils will be higher. It has also been asserted that teacher research will stimulate positive changes in the culture and productivity of schools and raise the status of the occupation of teaching in the society. Additionally, it has been declared that teacher research will produce knowledge about teaching and learning that will be useful to other educators, policy-makers, academic researchers, and teacher educators. (Zeichner, K, 2003).

It has been argued that teacher research as a form of professional development has often had a profound effect on those who have done it, in some cases transforming the classrooms and schools in which they work. It has also been concluded from analyses of researchers' self-reports across the world that teacher research helps teachers to become more flexible and more open to new ideas (Oja & Smulyan, 1989 as cited in Zeichner, K, 2003). It helps teachers become more proactive and self-directed in relation to external authority (Holly, 1990 as cited in Zeichner, K, 2003). It Boosts teachers' self-esteem and confidence levels (Dadds, 1995 as cited in Zeichner, K, 2003). It narrows the gap between teachers' aspirations and realizations (Elliott, 1980 as cited in Zeichner, K, 2003) and helps teachers develop an attitude and skills of self-analysis that are then applied to other aspects of their teaching (Day, 1984 as cited in Zeichner, K, M, 2003).

Moreover, teacher research as a form of professional development also changes patterns of communication among teachers leading to more collegial interaction (Current & Hirabayashi, 1989; Selener, 1997 as cited in Zeichner, K, M, 2003).

In this sense, Borg (2014) gave some examples of what teachers engaged in teacher research have said:

“They feel more confident, motivated and autonomous; they also feel they are more knowledgeable and have a better understanding of their students. Where teacher research is collaborative, teachers have also reported improvements in their relationships with colleagues”. (ibid: 26).

Borg added that teacher research allows teachers to be more optimistic; as one teacher she worked with said:

“I look upon problems as challenges to be overcome through research not hurdles to cry about”. (ibid: 27).

Renewed enthusiasm is another benefit that teachers derive from teacher research, as illustrated in this comment:

“We have been teaching the same way we taught ten years ago but now we have an urge to experiment with new ideas in our teaching”. (ibid).

Teachers have a unique insight into what works for classroom practice. Sometimes teachers are more aware of what works in a classroom than an academician. Thus, teachers have the potential to make substantial contributions to the field of education. This is the position that Dr. Borg was supporting at the conference in his book “*Teacher-research in Language Teaching*” (Borg, 2013). In his book, Borg asserts, “...teacher research has the potential to be a powerful transformative force in the professional development of language teaching” (p.6). Therefore, exploring the relationship between teachers and research is vitally important. The potential benefits of teacher research have been widely reported on in the literature as indicated before in this section and as summarized in Borg (2013). They are:

- Improved teacher decisions and judgments
- Reduced feelings of frustration and isolation for teachers
- Allows teachers to be innovators
- Teachers become more critical, reflective, and analytical
- Teachers rely less on external sources to supply answers to problems
- Fosters connections between teachers and researchers
- Improves teachers’ sense of self-worth and status
- Reduces the gap between research findings and classroom practice
- Develops a problem-solving mindset for teachers
- Increases the professional status of teachers
- Empowers the teacher to influence the teaching profession
- Has the potential for improving the entire educational process

It seems clear then that teacher research offers many potential benefits to teachers; their students also benefit from more informed pedagogical decisions where a culture of research exists across a school.

2.3. EP as a form of re-thought practitioner research

In this section, we shall present a brief overview of the rationale behind the development of EP as a form of teacher research.

EP has emerged from discussions over many years about how help could be provided to practitioner-researchers to avoid the ethical and epistemological problems

identified with other research models. Such matters have attracted considerable attention recently, with a groundbreaking special issue of the *Modern Language Journal* devoted to the ‘Methodological, epistemological, and ethical perspectives on instructed SLA research’ (Ortega, 2005). In that volume, Allwright argued that focusing on the technical aspects of research method is not going to meet our needs, because the most urgent problems we face are basically not technical but ethical and epistemological.

Allwright argued that what we need, therefore, is not a new set of technical proposals but a properly principled basis for the overall conduct of research as an ethical and epistemological matter. To address the epistemological problems, Allwright wants to make clear that the choice of practitioner research as an approach to investigation should not be justified in itself in methodological (technicist) terms. Practitioner research should be defined more in terms of relationship of identity between the people being investigated and the people doing the investigation, rather than as a research tool. Defining EP in terms of ‘relationship of identity’, it is a plural first person pronoun ‘*We* research *our* practice’ compared with the academic researcher’s ‘*I* research *your* teaching,’ and with the Action researcher’s ‘*I* research *my* teaching.’ The purpose of EP in practice is to build a relationship of collegiality and mutuality (Allwright, 1992), and involve everybody i.e. learners, and colleagues (Allwright, 2003) in the process, and help each other develop understanding about the issues in their own ways.

2.4. Development of EP

The reasons behind the development of EP are essential to present so that we could understand the difference between EP and AR. Thus, a brief historical outline is presented.

Allwright became disillusioned with the efficacy of the academic model used by teachers to become their own classroom researchers when he was asked to work as an academic researcher to raise the research profile of the teachers in Rio de Janeiro Cultural Inglesa in Brazil. He observed that classroom based Second Language Acquisition (SLA) research as well as Action Research tended not to be different from academic research in terms of its methodological demands, and had felt the projects were time-consuming. Thus, Allwright started searching for a classroom research model

which should be practically viable for practitioners in their given circumstances, and had immediate relevance to the lives of those involved, both teachers and learners.

On the Genesis of EP, Allwright stated the following:

EP has been developed over the last 15 or so years as an approach to practitioner research that is devoted to the understanding of the quality of language classroom life. It started in reaction to both academic classroom research and Action Research, the practitioner research model most in vogue at that time in our field. At first looking for an alternative to current academic classroom research practices on largely ethical grounds, EP developed over time primarily as a set of principles rather than as a set of classroom practices. (Allwright, 2005 as cited in Hanks, 2017, P 85)

2.5. EP as an ethical framework for teacher-research

Allwright (1992) first came up with a list of design criteria laying down the ethical framework of EP as a form of practitioner research. The emergence of design criteria was “an attempt to redress the balance after years of well-intentioned mistakes of prioritizing technical concerns over the ethical” (Allwright, 2005:355). The set of design criteria called for ‘integrating research into pedagogy’ in order to address the technical issue of employing academic methods for classroom research which was taking too much of teachers’ time, and becoming parasitic upon the normal working lives of teachers. Therefore, the move was made in light of two aims: how to address the issue of burn out, and then to ensure what teachers did was quite useful for the lives of teachers and learners. According to a list of design criteria, EP as a form of practitioner research focuses on how “to get pedagogy done in a way that incorporated a research perspective” (Allwright, 2005:356) in contrast to academic and action research, both of which prioritise research over a pedagogy and interrupt the normal teaching environment by employing academic research tools. According to Allwright, this ‘parasitic’ nature of research (1999:11) may be mostly due to the fact that research is traditionally conducted *on* teachers (not to mention learners) and their classrooms, without direct reference to their professional and personal concerns, as he rightly puts it:

“We need also to face the apparently well-earned accusation that research in the classroom has typically been highly parasitic, taking up valuable class time and offering little or nothing in return to teachers or to learners”
(Allwright, 1999: 11)

2.6. Principles of EP

In this section, we shall discuss the principles of EP which are considered the epistemological explanations of the tenets of its development.

The principles of EP developed themselves naturally from the work of Allwright and a number of English teachers when Allwright was invited in the 1990s to go to Brazil, more specifically, to the Rio de Janeiro Cultura Inglesa (a major not-for-profit language school) to help its teachers raise their research profile. Allwright started teaching them classroom research skills. It was at this time that he begun to have serious doubts about the wisdom of what he helped set up in Rio. Allwright (2005) assumes that the classroom- based SLA research project was clearly taking up far too much staff time to be worth pursuing, and it was also requiring staff to learn research skills that were not likely to be helpful in their lives as teachers. So it was heavily parasitic upon their normal working lives, rather than supportive of them, or integrated into them. This reinforced Allwright’s perception of those teachers as extremely dedicated professionals who were already putting as much into their work as anyone could reasonably expect of them. And they were very tired. Consequently, Allwright soon formed the opinion that what they needed from him was not a new set of doubtfully usable academic research skills, but some recognition of how close they were to burnout. The following principles were developed as a reaction to what is discussed above:

The following first two principles are regarded as the most appropriate central concerns for inclusive practitioner research:

- **Principle 1: put quality of life first:** as discussed by Allwright and Hanks (2009) ‘Quality of Life’ for language teachers and learners is the most appropriate central concern for practitioner research.

- **Principle 2: work primarily to understand quality of classroom life:** work primarily to understand the ‘quality of life’, as it is experienced by language learners and teachers, is more important than, and logically prior to, seeking in any way to improve it.

The following work by Zhang (as mentioned in Allwright and Hanks, 2009: p 150) on the teaching of extensive reading in China illustrates the potential value of moving from a technical, problem-solving approach to a ‘quality of life’ perspective:

Illustrative example. Zhang on prioritizing ‘quality of life’ in her classroom

Frequent modification to my teaching methods did not produce any positive results. For some time, I did not come up with any solution to my class. Then after reading about Exploratory Practice, I came to see that I did not understand what was happening in my classroom. I had been so worried about the teaching outcomes...about the examination results, that I never cared whether my students enjoyed the class or not. It suddenly occurred to me that the only way out was to emphasize ‘the quality of life in the classroom’. According to EP principles 1 and 2, I decided to put the ‘quality of life’ first to directly solve problems as I had done up till then. I stepped back from the problems in my teaching and saw them in the larger context of the life and lives they affected. (cited in Allwright and Hanks, 2009, p.150).

Principles 1 and 2 of Exploratory Practice are put under the microscope by Gieve and Miller (2006) who in their detailed discussion claim the importance of engaging the affective aspects and the cognitive, behavioral and linguistic aspects together in the field of L2 teaching. In their view, understanding the quality of classroom life has to do with viewing the learner as a whole person with social, psychological and emotional features in addition to his cognitive and linguistic features. (see Gieve and Miller, 2006:ps 18-46 for recent extended discussion).

- Principle3: Everybody needs to be involved in the work for understanding
- Principle4: The work needs to serve to bring people together
- Principle5: The work needs to be conducted in a spirit of mutual development

These three principles might be discussed together under the term of ‘collegiality’. Allwright and Hanks (2009) claim that everyone should have the opportunity of reaching whatever level of understanding they are capable of, however ‘deep’ or

‘shallow’ that may be. They argue that learners in principle are capable of taking learning seriously, of taking independent decisions and of developing as practitioners of learning. These three principles do, for learners to behave individualistically and idiosyncratically, while also working to bring everyone together in a collegial spirit of mutual development.

Illustrative example. The Rio EP Group on collegiality:

There is still a feeling that a teacher is a know-all, someone who cannot ask for help because if he does so he will be considered as a lesser professional. And this feeling is also present among students and towards the students (from the part of the teacher). For some teacher, this is the understanding: to realize that you and the participants of the classroom scene are colleagues and can share their feelings and weaknesses openly (because teachers and students already knew each other’s weaknesses but did not have a moment or a place to share this perception. (cited in Allwright and Hanks, 2009, p 152)

A further dimension in these principles of collegiality is bringing teachers and researchers together. Block, 2000 (as cited in Allwright and Hanks, 2009, p 152) claims that moving to relationships outside the classroom, between teachers and researchers, say, then we frequently find a relationship of mistrust, if not of downright hostility. According to Block, this mistrust; from the teachers’ point of view, arise from researchers turning research into a largely parasitic enterprise, leaving the teachers feeling exploited, and perhaps also sensing that their learners are both exploited and marginalized. So, the wish of EP is to bring ‘everybody together in a spirit of mutual development’ to resolve the teacher-researcher issue and to bring collegiality into the teacher-learner relationship as well.

- Principle6: Working for understanding is necessarily a continuous enterprise
- Principle7: Integrating the work for understanding fully into existing curricula practices is a way of minimizing burden and maximizing sustainability.

Doing research in the classroom by teachers and learners appears to guarantee severe overload for these practitioners who are busy enough already. Any hint of overload may discourage people from even trying and if they do try, any actual overload could lead rapidly to burnout and early abandonment of any research project. Therefore, according

to Allwright and Hanks (2009), we need one more principle to help make the research process practical and ultimately indefinitely sustainable. In EP, this is done through the use of familiar classroom activities as investigative tools. If this is done well, Allwright and Hanks (2009) argue that good research itself can be good pedagogy.

Illustrative example on integration. Santiago on exploring why her group was so difficult to manage:

The starting point was a brainstorming considering ‘quality of life’ ...The following moment was to write sentences using ‘should’ or ‘must’ (the current language topic from the course plan) regarding the role of students and the teacher in class. I collected the sentences made in groups and, in the following class, the sentences were shared with the whole group. On that day, they had chances to write their comments about our work and future life in class, taking into consideration the sentences made by them. (cited in Allwright and Hanks, 2009, p 155).

Allwright and Hanks (2009) argue that such integration fully preserves the language curriculum and learning time, without necessarily increasing the preparation time- two important factors facilitating sustainability.

2.7. An Empirical Study of EP

Aline’s story of doing EP

In the beginning of this year I was in a quite difficult situation because I had to face an eighth grade group that has been seen as the worst at school, principally in relation to discipline. After some bad moments together, I was quite irritated and could not stand the situation. So I decided to start some work based on an Exploratory Principle using the subject I was dealing with according to the course plan (‘must’ X ‘should’). The starting point was a brainstorming considering ‘Quality of Life’ immediately linked to ‘Quality of Life in class’ – one of the EP principles. The following moment was to write sentences using ‘should’ or ‘must’ regarding the role of students and the teacher in class. I collected the sentences made in groups and, in the following class, the sentences were shared with the whole group. On that day, they

had the chance to write their comments about our work and future life in class, taking into consideration the sentences made by them. In addition, they could try to guess what my initial puzzle was: ‘Why am I so irritated when I have to face the 807 group?’

To my surprise, my terrible group was able to understand that it was necessary to improve our life in class and really took part in the talk and process of understanding what was happening. They realised that the responsibility of having a pleasant class needed to be shared, it was not only my own concern.

Aline adds:

Also, they helped me realise that I was partially responsible for our bad relationship, because I was unable to listen to them. After three classes sharing ideas, we could understand that respect from both parts was necessary. Also listening was part of our life in class, although we were not exercising this ability. I can say that we have grown with this simple way of understanding something that has made us so uncomfortable in class. Now, we really are a group! Our life in class is much better!

Aline’s puzzle might have put her into problem-solution territory, but instead she drew back and simply put her trust in the class, involving them directly, if not explicitly, in the puzzle refinement process we have been advocating. And it worked, so well that we can see how the collegial principles of EP have entered into the communal life of the 807 group.

Source: (Allwright and Hanks. 2009. P: 191).

Conclusion

This chapter reviewed existing literature on teacher research in general and on exploratory practice as a specific approach that was adopted for teachers’ professional development in our study. First, Teacher Professional Development was introduced and defined. Second, reflective and inquiry-based approaches to professional development, teacher research and exploratory practice were viewed too. It is worth mentioning that all literature was based on studies outside Algeria.

The practical part of our study tried to explore the effectiveness of EP to teacher development. It also stressed the challenges of its implication in Algerian Secondary School EFL classrooms as well as the longer commitment of our informants to doing it.

Generating evidence on these areas of concern, then, will establish the subject matter of the next chapters of this dissertation.

CHAPTER TWO

Research Design, Methodology and EP Workshop

Introduction

This chapter attempts to describe the methodology that was used both to collect and to analyse data for this investigation. It opens with an identification of the type of our research; next, it defines and describes the strategy of data collection and their aims explaining the rationale behind their use. This is in addition to the type and number of the participants involved in this study and reasons behind the choice of our sampling. Concerning data analysis, methodology involved the steps and procedures followed to describe and analyse data collected by research instruments: that is how data collected were analysed qualitatively, in addition to the procedures used to interpret the findings of the analysis for the qualitative data collected.

This chapter also provides a description and critical consideration of the EP workshop that has been conducted by the researcher and the teachers' participants in Abd Rahman Mira Secondary School .

2.1. Choice of Research Methodology

This study is qualitative. Its aim was both to explore the impact of exploratory practice on teachers' development at Secondary School EFL classrooms and to understand the obstacles that they encountered in their teacher-research project from their personal engagement in EP. The study also aimed at evaluating teachers' longer commitment to practicing EP as an approach to their professional development after their first engagement in it (focus was on teachers' personal reasons why they continued or discontinued doing EP). Participants were also asked to provide us with reports of how they proceeded in their later engagement in EP through the open-ended questionnaire. Therefore, we focused on qualitative data collection and analysis. The main reason behind the use of the qualitative paradigm will be discussed in the following section:

Cohen, Manion and Morrison (2007) contend that the views of social reality can be understood from either the subjective or the objective approach. This research study adopts the subjective approach to highlight the "subjective experience of individuals in the creation of the social world" (Cohen et al., 2007). This decision was made as this

research study focuses on generating understandings of the research topic from the teachers' perspectives. Consequently, the data gathered from the research participants is heavily influenced by their EP experiences which provided justification to pursue this research study from the interpretive paradigm.

The interpretive paradigm is described as a view that sees “the subject matter of the social sciences – people and their institutions – is fundamentally different from that of the natural sciences” (Bryman, 2008, p. 15). This is supported by Coleman and Briggs (2002) who assert that “the world of educational research is different from the world of the natural science researcher – all educational research needs to be grounded in people’s experience” (p. 18). Moreover, Cohen et al. (2007) add that the interpretive paradigm treats the knowledge gathered from a research undertaken as “personal, subjective and unique” (p. 7). For this reason, the interpretive paradigm is believed to be the most suitable for this research study as it allows in-depth exploration of the teachers’ views of their EP experiences and how they relate them to their professional development.

The research strategy that was adopted for this research is ‘case study’. According to Merriam (1998) a case study is an empirical enquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident which results to an intensive, holistic description and analysis of a single instance, phenomenon or social unit. The case study approach is chosen as it allows in-depth investigation of the teachers' perceptions of the impact of EP on their professional development.

2.2. Research Setting

My position as a Teacher of English at Secondary Education level in the area of Bouira has helped me carry out an EP project with four of my colleagues who work in the same area and collect data from them.

This study was carried out in two different Secondary Schools in the area of Bouira during the second and third terms of the academic year 2015/2016. The first Secondary School: “Abd Rahman Mira” is situated in the city center of Bouira. Two of our participants work at this School (Teacher C and Teacher D). The second Secondary

School where the two other participants (Teacher A and Teacher B) work: “Louni Messaoud” is situated in the town of El Hachimia which is 20 kilometers far from the city center of Bouira. Both of these areas are multilingual and multicultural. English is taught in addition to Arabic, French and Tamazight which are currently used.

2.3. Research Population and Sampling

In this research, we employed purposive sampling technique in the selection of our research informants. Purposeful sampling is based on the assumption that the investigator wants to discover, understand, gain insight and therefore must select a sample from which the best can be learnt (Merriam, 2009). Moreover, Patton (2002, as cited in Merriam, 2009, P 77) argues that the logic and power of purposeful sampling lies in selecting *information-rich* cases for the study in depth (italics is original).

In line with this, the following three criteria are identified for informant inclusion in this study: (1) Secondary School English Teachers who welcomed the concept of teacher-research and showed interest in knowing more about it; (2) Secondary School English Teachers who accepted to attend an EP workshop/training which was held before their first engagement in EP; (3) novice and experienced English Teachers were included.

Because qualitative investigation aims for depth as well as breadth, the analysis of large numbers of in-depth interviews would simply not be manageable because of a researcher’s ability to effectively analyse large quantities of qualitative data (Ritchie and Lewis 2003). So, to be able to effectively manage our data which was gathered from in-depth one to one interviews as well as open ended questionnaires, we decided to include four participants in this study, as Miles & Huberman 1994 put it: “sampling in qualitative research usually relies on small numbers with the aim of studying in depth and detail”.

2.3.1. Description of the sample

As mentioned earlier, Secondary School EFL teachers were required in this investigative study in an attempt to elicit information about their perspectives on EP as an approach for their professional development. This category of teachers, are also known as PES in the Algerian educational context. Their educational level and teaching experiences vary. Their descriptions are below:

Teacher A. Teacher A teaches English at Louni Messaoud High School. She graduated from the High School of Teachers of Bouzareah, Algiers in 2013. She received theoretical as well as practical pre-service training at this school which is a non-university Higher Education Institution specialising in Teacher Education (Ecoles Normales Supérieures (ENS)). In Algeria, pre-service teacher training programmes are only provided by the ENS, all of which are registered with the Ministry of Higher Education and Scientific Research. Qualified teacher status is automatically awarded to the teachers upon completion of the ENS programme of appropriate length (five years training for Secondary School Teachers).

At the High School of teachers, she studied general didactics, the use of study programmes, manuals and school legislation and undertook a practical placement during her 5th year. This practical component of her Training Programme included both observation of in-service teachers and actual teaching practice. The proportion of time assigned to each varied between 15 days for observation and one block placement of 15 to 30 days. During her block placement, she delivered her first English lessons independently without the guidance of the training teacher. After her graduation from the High School, she has been teaching English at Secondary School for 3 years. In her school, she was involved in in-service training seminars organised by the English inspector of the District of Bouira for twice or thrice or so far per school year. She has not been engaged in any teacher research project during her teaching career.

Teacher B

Like Teacher A, Teacher B also graduated from the High School of Teachers (ENS) of Bouzareah, Algiers in 2008. She received the same pre-service training described above with Teacher A, but unlike Teacher A, she received a training period of 4 years only. She was preparing for PEF degree (Professeur de l'Enseignement Fondamental). In 2008, she first taught English at a Middle School for 2 years. In 2010, she succeeded in the test for PES certification to become a teacher at Secondary School level. After passing the test for certification, she taught English in different Secondary Schools in Bouira. She has participated in different PD activities both in school and other institutions such as the British Council workshops. Some of these PD activities were related to pedagogy, curriculum and the use of ICTs. TB also teaches English at

the University of Bouira in the Sport Department. In terms of research experience, she has never been part of a teacher research project in her teaching career.

Teacher C.

In 1986, this teacher completed her degree of 'Licence Anglais' from the University of Algiers 1. She has been teaching English at Algerian Secondary Schools for 30 years. Many PD activities in which she has participated were seminars related to her teaching field and profession as an English teacher. Her involvement in Regional or National Conferences and meetings were very limited. She also lacked opportunity to engage in teacher research projects during her professional life.

Teacher D.

Like Teacher A and Teacher B, this teacher graduated from the High School of Teachers (ENS) of Bouzareah. He spent 5 years training in the High School. He graduated in 2010 and has been teaching English in the same Secondary School for 6 years. Some PD training he has participated in is relevant to his teaching profession; these include seminar sessions presented by the Inspector as well as British Council workshops concerning the teaching of the four English skills as well as textbook use and adjustment. TD is also an active member in the Algerian Association of Teachers of English (AATE). This Association aims to create an atmosphere of communication and coordination between Algerian teachers and Inspectors to develop curricula and methods of teaching English as a foreign language. It also seeks to inform all those interested in the field of ELT about the latest innovations in teaching English via the Internet and social networking. He participated in a number of special workshops and intensive classes, training sessions for teachers as well as students organized by the AATE. As a member of this organisation, he has been chosen by the Inspector to contribute to the design and preparation for the implementation of a new approach (ABA) Action Based Approach in the English Teaching at Secondary Schools. This teacher is also preparing for a Master degree in Drama Arts, and he is also teaching English at the University of Bouira. TD as well had no teacher research experience during his teaching career.

2.4. Instruments of data collection: description and rationale

Following the outline of the theoretical framework in the previous section, the purpose of this part of the chapter is to expound the data collection strategies, through an exploration of the research instruments utilised to undertake this investigation.

There are different types of data available to a qualitative-based research. As qualitative research focuses on the subjective aspect of an area of concern; spoken, written and observed data have to be taken into consideration. In this study, spoken semi-structured (interviews) and written (open-ended questionnaires) data are used. The research questions were constantly referred to in deciding on the types of data to be collected for this research study. By doing so, we believed that we had successfully avoided being overwhelmed by the amount of data collected in the process

The most commonly employed research methods for a case study are interviews, document analysis and observation (Yin, 2009). For this reason, we choose to utilise semi-structured one-to-one interviews as well as open-ended questionnaires as the most fitting research methods to gather information for this dissertation. Each of the instruments used in this research project had been carefully chosen to maximise the amount of relevant data collected. Detailed justification for choosing each of these methods is provided in the following sections of this chapter.

2.4.1. Interviews: general description

Here is a general description of the interview used for the collection of qualitative data which yielded responses to our 1st and 2nd research questions. Before all, this section includes the general objectives of the semi-structured interview. Then it shows how the interview was designed for participants' responses, how questions were designed to receive these responses and the objectives of each. This is in addition to the rationale behind the use of this data collection instrument.

2.4.1.1. Rationale

Interviews are planned; pre-arranged interaction between two or more people, where one person is responsible for asking question related to the research topic while the other person is to respond to the questions asked (Lankshear & Knobel, 2004). Qualitative interviews which are generally semi-structured or unstructured, of longer

duration, and conducted one-to-one are the most suitable for this research as we wanted to get in-depth understanding of the research topic from the teachers' perspective (Bryman, 2008). Moreover, a qualitative interview is believed to be the most appropriate research tool for this research project as it focuses more on the interviewee's point of view instead of the interviewer's as practiced by quantitative researchers (Bryman, 2008).

We also chose to utilise in-depth semi-structured interviews as the major research instrument as it allows deep information to be collected (Hinds, D, 2000) from the participants interviewed. Cohen et al, (2007) for example state that one of the reasons of choosing interview for a research instrument is its ability to gather information that answer the research questions.

2.4.1.2. The general objectives of the interview

Two major aims were put forward for our interview:

- Exploring how the participants evaluate EP as an approach for their professional development
- The challenges that they encountered during their engagement in EP.

2.4.1.3. Semi-structured interview guide

The interview guide contained four major questions designed for receiving participants' answers. The first and the second concerned responses related to teachers' positive experience with regard to the importance of EP as an approach to teacher development to them. The third question was designed to receive participants' responses with regard to their negative experience with EP; that is the constraints that they faced during their engagement in it. While the fourth question was designed to gather information about what the teachers might suggest for a better teacher-research engagement in their local contexts based on their personal experiences with EP. The interview guide is shown in the following table:

- | |
|---|
| <ul style="list-style-type: none"> • What our informants learnt from doing EP. • Evaluation of EP as an approach to their professional development. • Difficulties and obstacles, they encountered during their first EP experience. • Suggestions for future EP experiences. |
|---|

Table1

The questions which were asked during the interviews were not necessarily asked in the same way with each individual teacher because of the unpredictable nature of the interactive discussions with the teachers. The responses of the teachers affected the flow of interviews and thus some other questions were asked, however, the order of the principle questions that figured in table1 was maintained in all interviews. This was probably affected by the extent to which every teacher engaged in the EP project and their competencies as new teacher-researchers.

2.4.1.4. Questions of the interview

The questions of the interview were distributed into the following steps:

- *What did the teachers learn from their EP experience?* (We expected that answers of this question will directly answer our first research question).
- *How did the teachers benefit from EP as an approach to their professional development?* (Answers to this question are the most important as they will help us evaluate the efficacy of EP as an approach for the teachers' development).
- *What constraints or difficulties did the teachers encounter during their EP experience?* (This part addresses the second research question of this study.)
- *What do teachers suggest for future EP experiences?* as the teachers' experiences might be valuable for designing future professional development programs that are based on the principles of EP, this last question of the interview might help us know about what our informants could propose for future EP experiences which could be conducted either by them or by other teachers based on their positive as well as negative experiences with EP.

2.4.2. The open-ended questionnaire

Here is a detailed description of the second data collection instrument of this research which was an open-ended questionnaire. We shall provide a general description of the questionnaire, the rationale behind its use for this study, a description of the content of the open-ended questionnaire as well as a description of each individual scale of the questions asked on informants.

2.4.2.1. General description of the open-ended questionnaire

The second instrument used in this research was an open-ended questionnaire composed of 11 questions. It was administered to the four participants as they completed their first EP experience. This questionnaire was conducted to provide more qualitative data for the study, but primarily to inform us about the teachers' longer commitment to doing EP and thus, provide answers to the 3rd research question of this study. This data collection instrument aimed at exploring whether the participants engaged in further research experiences tackling the reasons that made them do other EP experiences or withdraw from the EP project. Teachers were asked to describe in details the puzzles they investigated, the procedures (methods) they used to investigate them and their reflections on the research experience. This helped provide individual reports about the teachers' EP experiences as well as help us evaluate them in terms of the principles of EP.

2.4.2.2. Rationale behind using an open-ended questionnaire for this study

As the approach of our research is purely qualitative, we could have used other tools such as: group discussions, teachers' documents, teachers' diaries...Nevertheless, it seemed more appropriate and practical for this study to use an open-ended questionnaire mainly for the following reasons:

1. The main reason behind the use of the open-ended questionnaire was to give enough time to the respondents to think and thus avoid the issue of anxiety that they faced while answering interview questions. All our participants mentioned that they had many things to say about their EP experiences, but they forgot some

precious pieces of information during the recordings. This has caused us to stop recording many times during the interviews. Writing their answers on paper was believed to help them organize their ideas in a more comfortable way.

2. Another motive was to collect more detail for our research questions. Through an open-ended questionnaire, the respondents of this study had the freedom and space to answer in as much detail as they wanted which helped qualify and clarify their previous responses of the interview questions which yielded consistent insight for us providing more reliability to our results.
3. Because of the nature of our topic and research questions, it was necessary to provide individual reports about how the teachers proceeded in their EP experiences during their further engagement in the EP project, as such; an open-ended questionnaire was the most useful tool for the participants to write about their EP reports in terms of their puzzles and the ways of working and dealing with them.
4. Teachers had to complete the questionnaire during the summer holidays, and because it was difficult and heavy for us to organize meetings using group discussions for example, so completing an open-ended questionnaire was seen as the most practical tool to use.

2.4.2.3. Form and content of the open-ended questionnaire

The content of the open-ended questionnaire was much similar to the content of the interview that was held after the completion of the first EP experience, but more focused on the participants' puzzles, the ways they investigated them and their reasons for engaging in further EP research.

The questionnaire consisted of 11 questions and was handed to the teachers after their completion of the first EP experience. Participants were given enough time to complete it during their summer holidays.

2.4.2.4. The scales of questions

The questions of the open-ended questionnaire were distributed into three major scales:

1. Scale one: participants' further engagement in EP, the puzzles investigated and the methods used for the investigation as well as why they chose to do further experiences.
2. Scale two: this scale was related to the questions that have already been asked during the interview: the effects of the further EP experiences on participants' professional growth and what motivated and demotivated them during the experiences.
3. Scale three: lastly, two questions were asked to know about the participants' willingness to conduct more EP research in the future and use it as another form for their PD. These two questions were also intended to add any comments on the topic based on their personal teacher-research experiences.

2.4.2.5. Description of each individual scale

Here, we provide a more detailed description of the three scales of the questions that were asked in the open-ended questionnaire of this study.

Scale one: participants' puzzles, procedures of investigation, reflection on the experiences and their motives of engaging in further EPs.

This scale was considered as the basic one in the open-ended questionnaire as through the first six questions of the questionnaire which formed this first scale that information and answers to our 3rd research question were attained. That is whether our informants engaged in other EPs or no and details about their puzzles and methods of investigation for those who did other EPs. This scale also provided answers to why the informants did or did not engage in further EPs.

The questions of this scale were as follows:

- 1) Did you do any other EP research?
- 2) If yes, what puzzles did you investigate?
- 3) Could you briefly describe the context of your research?
- 4) What procedures (method) did you use for the investigation?

- 5) What is your reflection on the research experience?
- 6) Why did you engage in other EP experiences? And if you didn't do any other experiences, could you please explain why?

It might be worthy of noting here that the 3rd question in this scale “could you briefly describe the context of your research?” aimed at providing more details to the teachers’ reports of their EPs as it seemed important to know about the level and streams of the pupils that were chosen by the participants for the understanding of their puzzles. It was not possible to provide the research reports without referring to the contexts of the investigations.

Scale two: participants’ perceptions on their further EPs in terms of their effects on their PD, how they could compare EP to the other PD programmes that were formally supported by their schools and what motivated and demotivated them during their further free engagement in EP.

It might be important to mention here that this second scale of the questionnaire was primarily designed to collect further information to answer our 1st and 2nd research questions as these ones have been sufficiently dealt with through the interview which was used as the principal tool to deal with the two first questions of this study. The rationale behind this was the expectation that our participants could organize their answers better and add any piece of information that they might have forgotten to mention during interviews.

Additionally, this scale was added in the open-ended questionnaire to check the consistency of the participants’ answers. This was expected to facilitate our analysis of the results as well as give us a chance to have different comments and chose the best ones for our final report in the chapter of analysis. The questions of this scale were:

- 1) Do you think EP improves your professional growth? Why? Why not?

- 2) What kind of in-service training do you find more beneficial? Why? (attending workshops, seminars, class observations by inspectors, reading available articles and books, teacher research)
- 3) What motivates/demotivates you during the EP research?

Scale 3: participants' intentions to engage in future EPs and further comment they could judge useful about EP in a specific way or about teacher-research in general.

Contrary to the previous scales, it is important to note that this one was not designed and used principally to answer our research questions, yet it seemed interesting to know about the participants' intentions about using the framework of EP as a new approach for their PD during their future teaching and to provide them with a free space to identify new issues which they couldn't capture while answering the previous questions, especially concerning their recommendations about the issue of teacher-research in our local context which we could implement later in the section of implications of this study. Finally, this section was to drive to a non-frustrating ending to the questionnaire.

2.5. Data analysis of the findings of the study

The following section will be about the procedures followed for the analysis of the data collected from interviews as well as open-ended questionnaires.

Data collected were analysed qualitatively only, thus, the qualitative analysis concerned data collected through both interviews and open-ended questionnaires, whose aim was principally and uniquely to explore and understand and not to generalise findings over a larger context. That is, its aim was to understand how an integration of a teacher-research approach that was grounded in the principles and procedures of EP, in EFL classrooms might affect teachers' professional development as well as understanding the obstacles met by the participants along their EP engagement from their experiences in their local contexts. The qualitative analysis of our two research tools will not be presented separately, that is, same procedures were used to analyse both interviews and open-ended questionnaires.

2.5.1. Data analysis of the findings of interviews and open-ended questionnaires

As mentioned earlier, interviews and open-ended questionnaires were designed to provide qualitative data which would help explore and understand how the integration of EP as an approach to teachers' development in EFL Secondary School classrooms impacted teachers' professional growth. This means that the aim of these tools was to understand not to measure, therefore, the findings of these data collection instruments were analysed qualitatively, accurately saying, through personal interpretations of the teachers' responses of their personal experiences with EP. Personal interpretations of what the participants said and written were the core procedure of our data analysis.

In the present study, thematic analysis method was employed for analyzing data gathered from interviews as well as open-ended questionnaires. Thematic analysis was chosen to analyze data gathered from our two instruments because it is particularly appropriate when the researcher aims to examine the data in order to discover common themes and thoughts from more than one participant.

Blacker (2009) argues that a rich thematic description of the entire data would assist him and/or the readers to get a sense of "*the predominant and important themes*" (p.83) (italics in original) from the data. A thematic analysis process analyses the data without engaging pre-existing themes, which means that it can be adapted to any research that relies -only on- upon participants' clarifications. In other words, each statement or idea contributes towards understanding the issues, which leads to an appreciation of the whole picture. Furthermore, presenting similarities and differences between the participants' perspectives will assist the readers to obtain a global view (Blacker 2009).

2.5.1.1. Procedures of thematic analysis

The thematic analysis in this study involved collecting, recording and transcribing the interview data as well as doing coding (Miles & Huberman, 1994).

We decided to personally transcribe all the interviews to become familiarised with their content. Once the interviews were transcribed, the transcripts were shared with all participants at the beginning of our analysis before moving to the coding process to check if they were plausible. Coding was done by hand instead of using any software:

this was because we had a small number of participants that we could handle their interview transcripts by hand.

In simple words, the analysis was carried out through the following steps:

- Transcribing data (from interviews)
- Reading transcriptions and questionnaire responses and getting familiarized with the data
- Coding a word, or phrase, or even sentences from the interview transcripts and from questionnaires that were considered relevant to our research questions (these were written on margins next to participants' responses. Highlighting relevant responses with different colors was also used to facilitate the process of coding). For example; reading through all data seeking anything mentioned about teachers' positive experiences with EP. Any words, phrases and sentences that related to this theme were coded. For instance: "I became aware of my students' problems" was coded from TA. "doing EP brought me better awareness of my teaching and of my students too..." was coded from TB; these sentences were highlighted with the same color during this open coding with the simple word: 'awareness' on the margin.
- Irrelevant responses which didn't serve the aim of this study were dropped out
- Categorizing participants' responses according to the different ideas that each response expressed; from the previous open coding, all the codes were grouped into categories and finally all categories were grouped as new themes.
- Interpreting the responses of each theme and narrating the results as how they relate to our research questions and to the aim of the study, i.e. understanding and evaluating EP as an approach to teacher development.

2.6. Issues of Validity, Reliability and Ethics

Merriam (2009) asserts that qualitative research which is based on different assumptions about reality and a different worldview, should consider validity and reliability from a perspective congruent with the philosophical assumptions underlying the paradigm. This may even result in naming the concepts themselves differently: credibility, transferability, dependability and confirmability, substitutes for internal

validity, external validity, reliability and objectivity have become widely adopted in qualitative research. (ibid).

In our study, to assure the respect of internal validity (credibility) that is concerned with how congruent are the findings with reality we used the following strategies:

- Member check (respondent validation): we checked meanings of transcripts and questionnaire responses with our participants before coding.
- Peer review: the supervisor and other experts helped in checking whether questions of our data collection instruments covered the objectives of our research

Concerning external validity (transferability) that is concerned with the extent to which the findings of one study can be applied to other situations and as our paradigm is purely qualitative depending only on responses and EP experiences from 4 teachers, the aim of our study was not to generalise findings. However, and as elaborated by Merriam (2009), generalizability in qualitative research involves leaving the extent to which a study's findings apply to other situations up to the people in those situations. The person who reads the study decides whether the findings can apply to his or her particular situation. (ibid). As such, replication of the present study might not yield same results.

As for ethics, the study was conducted in a climate of collegiality and respect between the researcher and the participants. The following steps were followed to respect ethics of research:

- Informed consent: participants were asked for their consent to be involved in the EP project. For this sake, a letter of invitation was signed by them where an explanation of the procedures that would be taken during the study was provided. (See Appendix 1, p. 125). Consent to undertake the study was also asked from the headmasters of each Secondary School.
- Confidentiality: this included the use of pseudonyms for participants and assuring participants that no one except the researcher and the supervisor would have access to the recordings of interviews.
- Explaining purpose of the inquiry and methods to be used: before starting the EP project, we explained to the participants that the purpose of the study is purely

academic and that our research does not have other purposes. They were also informed that they would attend an EP workshop/training, be interviewed and answer a questionnaire.

2.7. The EP workshop and first EP experience.

This section includes rationale behind the workshop, location of the workshop as well as its content. After describing how our participants learnt about EP, a description of how they engaged in their first EP experience is also discussed. This experience was considered as a first EP experience for their further engagement in exploratory practice. The participants were invited to attend the EP workshop which was part of the project explained in the teachers' invitation letter asking for their participation in this research study. The instructor of the workshop was the researcher who has previous background knowledge about EP.

2.7.1. Rationale of the workshop: The EP workshop was conducted to enhance teachers' pedagogic competence through doing research. Prior to this workshop, there had been no trainings which could broadly inform about teacher research approaches in the Secondary Schools of the district of Bouira. Hence, the workshop was held to introduce the concept of EP to teachers as well as training them to use it in their own classrooms.

In particular, the EP workshop has generally aimed at:

- Informing our participants about the concept and methodologies of EP design and its potential for its use as an approach to teacher development.
- Discussing the seven principles of EP in the light of the local context of the school.
- Helping participants to become able to integrate the research perspective into their pedagogy by designing a lesson and a lesson plan (see appendix 5, p 134 and appendix 6, p 136) made for this purpose.
- But most importantly, this workshop was designed to ensure that teacher-research is not conceived of by our participants in ways which make it look as unfeasible and irrelevant activity.

2.7.2. Objective of the workshop: It was expected that by the end of the workshop the participants would understand the concept of EP as well as be able to apply it in their classrooms. Furthermore, it aimed at enabling them design lesson plans with an integrated research perspective in order to do research but in the very same time do their teaching as they are used to.

2.7.3. Location and time of the workshop: the teachers preferred to conduct the workshop in Abd Rahman Mira Secondary School for the simple reason that the school was not far from their homes. The principal of the school allowed the teachers to use the available school facilities.

Concerning its time, the workshop was held over five days; the teachers attended the workshop during five Tuesdays from January 3rd to February 2nd, 2016, From 9.00 to 13.00. They decided to hold the workshop only during Tuesdays because it was their free day. Times allotted to content of the workshop are presented below:

Content of workshop	Hours allotted
• How teacher research differs from academic research	3
• From action research to exploratory practice	2
• Principles of exploratory practice	5
• How to do exploratory practice	4
• Integration of exploratory practice with pedagogy (preparation of a lesson plan)	6
Total	20 hours

Table2

2.7.4. Workshop mode of learning:

The delivery of materials took place through both lecturing and practical activity. The researcher used lecturing mode to explain the concept of EP. The content of the

workshop was prepared by the researcher in power point and presented with data show, visualizing information to the participants was believed to help them understand the material provided better and remember it.

Later, the participants were given a chance to actively participate in the workshop through expressing their understandings of the principles of EP and attach them to their local working context. Besides, teachers applied what they had learnt in the final stage of the workshop by preparing a lesson plan that would serve both pedagogy and research purposes for a first engagement in EP.

3.7.5. Content of the workshop: During the workshop, participants learned material related to teacher research and most importantly materials related to classroom EP. These content materials of the workshop were as follows:

- How teacher research differs from academic research
- From action research to exploratory practice
- Principles of exploratory practice
- How to do exploratory practice
- Integration of exploratory practice in pedagogy (through a preparation of an EP-based reading lesson)

Participants learned the history of exploratory practice, the differences between EP and other types of teacher-research, the strength of EP (weaknesses were left to be discussed later, after that the teachers did EP in their classrooms), principles of EP and its methodology.

The principles of EP were the major focus of the workshop: we emphasized that they were clearly understood by the participants. After lecturing and discussing the EP principles, our participants orally explained how they made sense of them in relation to their local context.

2.7.6. Procedures of doing EP

In terms of methodology, we used the modal proposed by Allwright (2004) to explain the steps of doing EP to the participants. This modal adopts the following process:

a The puzzle (identification and refinement of a set of research questions)

- o Identify a puzzle area.
- o Refine our thinking about the puzzle area (discuss with colleagues).
- o Select a particular topic to focus on.

b The method

- o Find appropriate classroom procedures to explore it (e.g., group work discussion, survey, role-play, diaries, poster session).
- o Adapt the classroom procedure to the puzzle we want to explore.
- o Use the procedure in class ('data collection').

c Reflection and interpretation

- o Interpret the outcomes.

d Implications

- o Decide on implications and plan accordingly.

2.7.7. Getting started on the first EP experience

After the presentation and discussion of the previous case study, our four participants discussed the activities that are part of their English curriculum which could be exploited for their first EP experience: they all agreed that they could use: written expressions, homework, group work discussions, pair work activities and project presentation, as these activities are familiar for them and for their learners too.

After discussing routine classroom activities that our informants intended to use for the EP study, they got started on EP research, accordingly, they immediately raised two questions:

1. How do we decide what to investigate?
2. How do we do it without losing valuable language learning time, or giving ourselves too much extra work?

A key term for us in dealing with the first question was 'puzzling' – reflecting on situations and asking 'why' questions about them, rather than rushing into looking for

‘solutions’. The term ‘puzzle’ represented teachers’ concern for developing understandings in relation to issues of immediate interest to them, whether or not they are ‘problematic’ and whether or not they connect them to theory. What mattered was that someone was interested enough in something to be seriously puzzled about it and so willing to work to try to understand it.

- **Identifying what is puzzling:**

When our informants got to the step of identifying their puzzles, they noticed that they have already been puzzled about many things for years and they thought hard about them already. At this moment, they realized that the time had come for their puzzles to be brought into the open and be investigated systematically.

We observed that the process of identifying the puzzles did not start artificially with a direct call for teachers to formulate puzzles, it was as easy as asking the teachers: ‘What is puzzling about what happens in your classes?’

The main puzzles that teachers identified were mostly about their learners:

- Why are learners disinterested in learning English?
- Why don’t learners take responsibility of their learning outside the school?
- Why don’t they do their home works?
- Why don’t they participate in the class?
- Why don’t they like to wear their uniforms?
- Why do they come late to the class?
- Why don’t they do their project works and presentations?
- Why don’t they like writing?
- Why do they forget the vocabulary they learn during lessons?
- Why do they use Arabic and French during group work discussions more than English?
- Why don’t they ask questions when they do not understand?
- Why do some learners like English class?
- Why do learners take a lot of time while doing their activities in class?
- Why do some learners feel embarrassed when the teacher corrects their mistakes?

- Why do others become aggressive when the teacher gives them advice?
- Why do learners become so talkative when they are assigned activities?
- Why do some learners always do all what the teacher ask them to do?

Participants wanted to start their first EP experience trying to understand their own puzzles, but this sounded challenging to us: if teachers did all the initiating, our EP work risked becoming just another teacher imposition, making no sense of any claim to be taking learners seriously as individuals capable of making their own decisions about learning.

The previous two questions have a very special status within EP, because if learners are seen as practitioners, the ‘we’ in the question must include them fully. The learners must develop their own agendas for what they want to understand.

Therefore, we decided to engage the teachers in a practical activity where they were asked to prepare a lesson plan together in order to start their EP through understanding learners’ puzzles and introducing the concept of EP to their learners. (The lesson and the lesson plan are available in appendices: see appendix 5, p.134 and appendix 6, p. 136)

By designing this lesson plan, our participants shared the responsibility for starting the ball rolling with their learners, moreover, they decided to prepare a reading lesson for the reason that providing learners with a reading passage about EP and asking them comprehension questions about it was a flexible way to prepare learners for the experience that they were going to share together.

The reading lesson was aimed to fit EP into participants’ as well as their learners’ normal working activities, thus, their first EP experience could be reconciled with curricular demands. We decided to start the first EP experience this way to respect one of the most important principles of EP, that one of integrating the work for understanding with pedagogy. In other words, learners of each of our participants were able to practice a reading skill as they used to, learn about EP from the reading lesson and start working for understanding.

- **Conducting the EP first experience following the workshop:**

After the workshop, teachers were free to decide when they had to do the lesson and thus starting their first EP experience.

- **Method:**

Learners were asked to write their expressions about puzzles (principle 6) in double sheets of paper in order for the teachers to collect them, take them home and reflect on them individually.

As they prepared the lesson plan together, we asked participants to carry on their collaboration. The written expressions were collected and the teachers gave themselves a couple of days to find time to read these before meeting to discuss them. We considered doing EP collaboratively would provide more collegial conversation and provide more chance for our informants to work together after the workshop.

Collaboration allowed our four participants to comment on the students' puzzles and decide to use classroom group discussion as a following step of EP; teachers gave the written expressions back to learners and divided them into groups according to their puzzles (learners with same puzzles were grouped together). The classroom discussion activity served to engage teachers and learners together in the process of doing EP (principle 3; involve everybody).

Our participants, who were keen on starting their first teacher-research engagement, commenced working on the EP project. The timeline given for them to work on this first experience was a month (February, 2016). During this period, they received assistance and support from us in order not to lose the momentum of the work.

2.7.8. Expected outcomes of the EP workshop

- Developing a research culture at school that lead to creativity and productivity.
- Helping teachers and learners to understand issues of teaching and learning in their classrooms.

- Respecting the idiosyncrasies of learners and the uniqueness of contexts in the teaching process.
- Looking at the social dynamics of language classrooms rather than just at pedagogical issues.
- Enhancing teachers' skills to do Exploratory Practice.
- Enhancing professional partnerships among teachers, and
- Enhancing the professionalism of teachers.

Conclusion

above has been the methodology which was followed throughout the steps of this investigation, with regard to the research instruments that were used, how data was collected, and how it was analysed and the rationale behind all the steps. This chapter has provided comprehensive background information about the EP workshop and the first EP experience in which the four teachers in this study participated. It has elaborated on information about how we delivered the EP workshop for the participants as well as organized the first EP experience phase for them.

Now we move to the next chapter which is concerned with the practical phase of the study including analysis of findings, discussion and interpretations of the data gathered qualitatively.

CHAPTER THREE

Data Analysis and Discussion of Results

Introduction

This chapter will show the findings of the investigation that were collected through interviews and open-ended questionnaires. The analysis of data was divided into two sections; section A deals with the positive experiences of the teachers with EP and what benefits EP brought to their professional development. The section also discusses the constraints and challenges that the participants faced during their engagement with EP and the implications that they offered for a better future engagement in teacher-research projects. Thus, this section answers the 1st and 2nd research questions of our investigation (RQ1, RQ2).

Section B discusses the longer-term commitment of the participants in EP as an approach for their professional development and the reasons that our informants provided as to why they did or didn't engage in other EP experiences after their first engagement in it. Hence, this section answers our last research question (RQ3).

It is worth mentioning here that section A includes discussion of the findings of the interviews as well as the open-ended questionnaire. Both of these data collection instruments were designed to produce answers to RQ1 and RQ2 in such a way that the interviews were primarily conducted to answer these two research questions while some questions in our open-ended questionnaire served the issue of triangulation and to check the consistency of the participants' answers. On the other hand, Section B includes discussion of findings from the open-ended questionnaire only, as it was the primary and only instrument used to tackle RQ3 this study.

Before we start presenting and discussing participants' responses, it might be crucial to draw attention to the following notes:

1. Some of participants' responses were used in their original lengths in case they represented samples of the teachers' experiences with doing EP. Or in case the teachers used their students' own expressions of their puzzles as examples. That is keeping the length in these cases was considered important.
2. We sometimes used three dots ... to cut some expressions from the participants' responses when they expressed their own standpoints and perspectives to keep

the quotations and illustrations short. This was done where it was clear it would not change what participants intended to say.

3. Most of Participants' responses didn't consist of grammatical errors as they were teachers of English. Very few errors were corrected in a way that would not change what they would have intended to say.
4. In some cases, the teachers used their students' expressions to illustrate. They read them from students' written expressions as they were exactly expressed by them. Thus, these ones consisted of some grammatical errors which were not corrected. They were maintained as delivered by the students without any modifications.
5. Punctuation was supplied in the transcriptions of interviews, here again, this was done where it was clear it would not change what the informants meant by their responses.
6. Parenthesis with three dots included in (...) were used in the interviews' transcription in cases where the participants remained silent before they could finish their answers. This occurred most of the time when the participants took some time to explain what they mean or just to think about the response.
7. Square brackets with three points [...] were usually used in the interviews' transcriptions in the following cases:
 - a. In cases where the participants utterances were not clearly expressed.
 - b. In cases where the participants modified what they said to repair their meanings
 - c. In cases there was repetition of words and utterances.

It is also worth mentioning here that in section A, the positive and negative experiences of our participants with EP are tackled from their first engagement in EP during the first EP experiences as well as from their further experiences in it.

3.1. Section A: Benefits of EP for the teachers' PD, constraints encountered during their teacher-research processes and solutions

This section describes the teachers' experiences of engaging in the first EP experience as well as in other experiences that they conducted after this one. It describes our participants' positive experiences with EP, the kind of challenges they encountered during their research and the suggestions that they provided for a better implementation of EP based on their personal experiences.

Positive experience with EP. All four teachers believed that engaging in EP benefited them in terms of their professional development and was a venue for their professional learning. Most of the positive experiences were shared among all the teachers, but they also shared some different benefits of EP that impacted their professional development. Walking through and analyzing the respondents' data from interviews and open-ended questionnaires, it was possible to sort out at least the following themes:

- 1. Impact of EP on teachers' awareness**
- 2. Impact of EP on teachers' practice**
- 3. Examination of teachers' beliefs and assumptions**
- 4. Appreciation of community and renewed sense of collegiality**
- 5. Autonomy and ownership of the professional development approach**
- 6. EP as a contextualized and relevant professional development approach**

- 1. Impact of EP on teachers' awareness:** all teachers in this study identified that engaging in EP had provided an opportunity to raise their awareness of their students' problems inside and outside the classroom as well as of their needs and interests in learning English which they ignored before. This provided them with a better understanding of their students and of their own teaching practices as a result of doing EP. Meanwhile, teachers also reported that they became aware of their students' capabilities as co-researchers.

TA explained that as a consequence of EP, she became aware of her students' problems inside and outside the classroom and this prompted her to understand them. She said:

“I became aware of my students' problems; I know what matters for them, I know what they are facing and not only in classrooms, but sometimes even out of the classrooms. A lot of things became clear for me now, once you are aware of your students' problems, you can deal with them, you try to understand them at least”

In regards to how EP helped **TA** understand her students' problems, she revealed the following story. **TA** noted that her first experience during the EP pilot helped her understand why one of her students was good at the writing skill but not that good at the reading skill, this teacher reported that she was so puzzled by this for so long, but she couldn't understand why until she engaged in EP. She noted below:

I knew that this pupil loves writing but now I come to understand why he does not like to read the texts of the programme and even the texts of tests and exams. Thanks to this simple investigation of EP (...) if you didn't introduce EP for us, I could not understand maybe why this pupil was good at writing while he did not like reading! This was puzzling me for a long time and I couldn't know why (**TA**)

TA's first experience with EP during the pilot led her to be more aware of her students' learning problems through her reflection on their written expressions about their puzzles. It can be seen from the following extract of one of her students' written expressions, how this activity as data collection tool was so revealing about her student's needs and interests:

In our textbook, some topics are not exciting and I feel bored and upset when I read a text talking about problems in our community. He (pupil) said: I prefer to read texts that has sprightly scientific information, this would improve my language and moreover it tells me what I did not know before... I feel upset and bored to read about problems in our community (**TA**)

After her reflection on this puzzle, **TA** was finally aware of why her student was not good at reading skill. She said:

“I have understood from this that all the texts we were dealing with during lessons or even during exams which he didn’t like to read, I come to realize that it is as if he knew all these (topics of texts) these were texts about bribery, corruption, ethics, he said in his written expression: “I feel upset and bored to read about problems in our community” he did not like the topics, so that is why he was not doing his readings”.

This teacher also reported that she became aware of her students’ capabilities that she ignored before. As a consequence of her reflection on one of her students’ puzzles about the English textbook, she felt that this student was more than just a learner, but a researcher too because of his expertise in criticizing the English textbook:

“I felt that he is really, that he was not a student! That he is really a researcher ...after reading his expression, I was like, oh my god! This pupil has such a capacity to criticize something as important as the textbook...he said that it was full of gaps; he was criticizing the textbook like an expert...he said: “the textbook needs an update, a total update from the content to the form” he really surprised me” (**TA**)

TA’s growing awareness of her students’ abilities made her proud of her learners and motivated her to trust them and believe in their potentials to help her improve the classroom. She stated:

I became too proud of my students too, I admit that I did not know that some of my students had all those capacities or that kind of consciousness so I realized that I can trust them because I have seen that they are really able to share the responsibility of improving the classroom with me, they just needed me to trust them and to give them a chance to do that. (**TA**)

TB noted that as a consequence of EP, she was more aware and more attentive to her pupils’ problems both inside and outside the classroom. She mentioned that

reading her pupils' expressions helped her learn more about her students' experiences with learning English, but also to know about some external factors that were daily affecting her students' learning that she couldn't know about before her engagement in EP. Talking about her increased awareness of students' problems outside the classroom, **TB** cited an example of one of her pupils who wrote about a problem that she was facing outside the school and that was seriously affecting her studies. When she was asked about how this pupil expressed her puzzle, she stated below:

...she wrote exactly: when the school day finished, once at home, my eyes become addicted to my phone, I do not hear any one, my mother call me million of times I do not hear her , I hear no one, the only place in I become a normal person is the classroom , but it is because we cannot to use our phones, the class is boring place then, when I am in classroom I feel impatient for getting home and connecting with the world, this is the only moment when I feel enjoy, I am not doing my home works; I only revise when exams come. I know that I have to blame myself for all this, but I need help... (**TB**)

Thanks to her reflection on this previous written expression, **TB** became mindful about the reason why her pupil was not doing well at her English exams despite the fact that she was good at English as she understood most of the words used in the classroom and she even answered with correct English when the teacher asked her questions related to the lesson, but she always surprised her teacher when she corrected her exam papers. **TB** noted:

“so now I come to comprehend that she is not revising the lessons that we do in the classroom. She only relies on her English vocabulary in exams and tests; I couldn't understand that before, thus I thought of her being a careless and lazy pupil. I have never imagined that she is really facing a serious problem, I even felt guilty when she wrote by the end of her expression that she needs help”

Once asked why she felt guilty when her pupil wrote that she needed help, **TB** replied:

“I should have known that, but I had no means to use for that purpose until I did EP”. It could be implied from **TB**’s words that teachers are not equipped with appropriate tools that they can use to understand their pupils’ problems and thus keep being puzzled about many issues that happen with their learners without getting enough understandings about them.

So far, **TB** did two other EP experiences in addition to her first experience (appendix 10, p. 150 and appendix 11, p. 153) here again she conveyed that these experiences made her aware of the reasons why her students were facing problems with the type of the review activity that she was using by the end of lessons which was one of the puzzles that she investigated. She conveyed in her questionnaire:

“doing EP brought me better awareness of my teaching and of my students too; I wouldn’t have been aware of the reasons why my students were not interested in participating in review activities until I have worked for understanding that”.

Through the data that she has gathered from her students, she said, she realized that her students lose interest by the end of lessons and do not volunteer to answer when she asks them to review what they have learnt because they didn’t like the type of the review activity that she was every time using with them (see **TB**’s reflection on her EP experience in appendix 10, p. 150).

TB’s words above might denote that if she has not investigated her puzzle about why her students do not participate in the review activity by the end of lessons, she would have probably kept using the same review activity due to lack of awareness and understanding and that she wouldn’t have supplied her learners with the type of review activities that they preferred to be involved in, or as she said “decide about the right practices to do in the classroom”.

Similarly, to **TA**, **TB** noted that as a consequence of EP, she became aware that her students can shoulder the responsibility of being co-researchers in doing EP. This teacher expressed that at the beginning, she was apprehensive and she admits she was not sure that her pupils could actually act as co-researchers, yet during the first EP

experience, she reported that her pupils responded positively to the idea of ‘co-researchers’ and could assume it as long as the procedures that they followed are the ones of EP. She most likely means here that her pupils perceived this research approach as a familiar activity due to the principle of ‘integration of research with pedagogy through a use of familiar classroom activities’ and thus made their role of co-researchers easier. **TB** said:

before the experience I doubted about their ability to take the work seriously, but I soon recognized that they (pupils) have many puzzles and that they really needed this research approach to bring their puzzles to the open and share them with me as well as with their classmates (...) I want to say that learners are really capable of doing research as long as the procedures are the ones of EP ... (**TB**)

TD noted that thanks to EP he was aware when his teaching practices did not successfully help his students to learn. He said:

...two or three students didn’t like the use of ICTs, I have never expected that! Because generally students like ICTs. They like to see pictures and videos, but in fact these students expressed another view; one of them just said: “I have never seen that English can be taught by ICTs” (laughter) he added that he cannot understand because with the use of data show the teacher doesn’t speak much. So I understood that he prefers when the teacher explains, this is easier to him. This is something that I came to know and that I ignored before (**TD**)

Similarly, to the other teachers, **TD** explained that he also became aware of his students needs and expectations from his reflection on his students’ puzzles. In this respect, he referred to the example of the student who wrote about her dissatisfaction when her teacher asks her to answer his questions when she is not willing to do that. After reading about her puzzle, **TD** grasped how this student expected him to treat her which is something that he ignored before doing EP. He wrote in his questionnaire:

...during the first experience (EP pilot) when my students wrote about their puzzles, I could learn many things about their expectations and needs because I noticed that what puzzled them was nothing less or nothing more than what they expected from me or from their learning of English. I can site here again the example of the student who didn't want me to ask her to answer questions or to participate in the classroom when she was not willing to do that; I have always been taught the importance of working towards meeting my students' needs, and this research helped me know what these needs are. (TD)

TC emphasized the importance of gathering qualitative data from students to become more knowledgeable about her students' learning experiences such as their learning difficulties, their likes and dislikes, what meanings do her learners attach to her teaching practice. She explains how this kind of data offers valuable insights into her students' personal experiences that cannot be revealed by statistical outcomes. In this sense, she described her displeasure with the extreme reliance on students' results in exams and tests to inform successful learning experiences:

“our profession is unfortunately centered on data that is statistical, I mean on results from one test, from one or at the end of school year and our education culture indicates that this is the only data that can be useful ...” (TC),

As a consequence of engaging in EP, this teacher recognized the usefulness of gathering qualitative data from students and how this made her aware of her students' puzzles during their learning experiences which cannot be informed by statistical data. In her own words, she stated:

(...) you know; these are things like “what students like and dislike during their learning?” “How do they [...] what meaning and relevance do they attach to my teaching?” (...) yes, questions like that but the problem is that these things cannot be informed through results of exams and tests (...) and you know; numbers are important, but they can't provide educators everything, especially when we are looking for those real causes of our students' learning difficulties and sources of what puzzles them ... (TC)

In terms of becoming more aware of their professional responsibility of lifelong learning, all participants in this study shared the same reflection after being involved in this EP project. **TD** noted that the EP experience provided him with an opportunity to test his commitment to lifelong learning and become more aware of his responsibility to learn along the way and recognize that someone entering the teaching profession does never stop learning:

The best part about doing EP was that I got to remember that I should stay a student forever and that teachers are truly lifelong learners. There is always a chance to learn in the classroom if I am to do research because whether it is EP or any other type of research, we always learn new things about ourselves and about the world around us when we research and look for truth... (**TD**: from questionnaire)

TA corroborated **TD**'s sentiment:

The experience made me feel more like a professional as it renewed that spirit of the 'teacher-student' in me... (**TA**: from questionnaire)

TB's and **TC**'s comments harmonized with **TA**'s. These two teachers too, felt their growing awareness of their responsibility as lifelong learners as a result of their engagement in EP:

Through doing this research, I became more aware of my teaching profession and that I have to keep growing as a professional to meet my pupils' interests and needs (**TB**)

Just like the students, we just need tools to use in our profession that can open our eyes to ways we can improve ... what's important is that we keep questioning ourselves and learning from our mistakes (**TC**)

It is clear from the teachers' statements that they benefited from the research project in terms of their growing awareness of their responsibility to lifelong learning.

Regarding the teachers' awareness of the social and psychological aspects that affect students' learning, **TC** described that her EP experience, she said, allowed her to stop for a while and reflect on other things that might be happening in the classroom while students are learning their English lessons, she described that these things are as important as English lessons too. When asked about what these things were, she responded: "students' lives in the classroom and quality of their learning experiences". She reported that the EP research helped her broaden her view of what constitutes the profession of teaching:

thanks to this teacher-research experience I suppose that we need to broaden our view of what constitutes or what forms [...] because in fact our work doesn't consist of delivering lessons only, but also of understanding emotional, social and psychological aspects that affect teaching and learning practices in our classrooms...(TC)

She further argued: "and you see, it was not possible for me to know about that until I have done something more than delivering a lesson, giving instruction and other pedagogic responsibilities"

In fact, the case of **TC** might be very revealing that there is a facet of that which teachers do in the classroom that might not have received the attention it deserves in professional development processes probably "because it is too complex" as **TC** stated. **TC**'s statement also implies that teaching practice is more than just effective pedagogical knowledge and mastery of content. We also need to consider the emotional and social dynamics of the language classroom which is also a crucial element of pedagogy that deserves significantly great attention.

TC's statement above about her awareness and broadened view of what constitutes pedagogy to include emotional and social aspects is in line with one of the expected outcomes of the EP workshop: looking at the social dynamics of the language classroom rather than just at pedagogical issues (see chapter 2, p 60)

2. Impact of EP on teachers' practice: the four teachers in this investigation acknowledged that EP had provided them with an opportunity to improve their teaching

practice based on their understandings of their learners' puzzles. Among the benefits they found we can site:

- the opportunity to tailor their teaching in ways that will satisfy their learners' interests and needs
- using students' data instead of intuition
- EP systematized participants' reflection
- adopt some teaching techniques to cope with students' puzzles in the classroom.
- feeling more confidence
- and more control and courage in their teaching.

Two teachers spoke about how EP supported them to improve their practices thanks to their reflection on the students' puzzles. The data revealed that as the teachers' understandings of the impact of their practice changed, so did their teaching practices. **TD** stated that he changed his practice based on an empirical truth that he discovered through EP referring to a case of one of his students who was puzzled by the fact that her teacher asks her to answer his questions even when she doesn't volunteer to do that. Thanks to his understanding of this puzzle, **TD** reported that he is no longer treating this student in the same way as long as he realized that his previous practice was not unavoidably beneficial. He commented:

(...) you know I have never thought that my practice disturbed that student because she does never show that in the classroom, so now after reading about her puzzle, I am no longer treating her the same way. I wait until she rises her finger showing willingness to participate (**TD**)

In the same way, as a result of her inquiry and the understandings she gained from the students' expressions of their puzzles, **TC** expressed her intention to change her practice with one of her students and to start treating him in a different way to make him feel more comfortable in the classroom. Mentioning an example of how her student's puzzle informed her improved practice, she said:

...he (pupil) wrote that he doesn't need to be told when he has done a good job or when he had a good mark and that he becomes less interested in

participating in the classroom because of my regular praise (...) he wrote that my praise makes him feel uncomfortable and that he finds himself in an embarrassing situation when all his mates look at him after being praised by me (TC)

As a consequence of EP, this teacher recognized that her excessive praise of her student was actually disturbing him instead of encouraging him as she thought. She commented: “but when I read what he wrote about his puzzle, I was like: what! Praise is bad!” And to demonstrate how the inquiry supported her to improve her practice, she mentioned:

after the inquiry, I revised my behaviour with him and I will not treat him the same way from now on, I will reduce my praise (...) at least I will make him feel comfortable (TC)

Teacher A and Teacher B wrote about how EP supported them to use teaching techniques that students enjoyed and really got involved in after their investigation of some of their puzzles during their engagement in further EP experiences.

The experiences of engaging in two other inquiries had helped **TB** to start using new types of review activities (appendix 10. P.150) that seemed to fulfill her students’ needs and learning styles based on their suggestions. Grounded on her inquiry, **TB** understood that most of her students were not participating in the review activity because the type of the activity that the teacher was using: ‘what have we learnt today?’ didn’t seem to be interesting for them and that they got bored of the same activity every time. To address this issue, she started using new activities like: ‘name that word game’ and ‘gallery walk’ (see same appendix) in catering to her students’ interests. She wrote:

The first thing I did when I read again about my students’ answers was thinking of how the activities that they suggested could work better for a review activity to meet their individual needs. I was very motivated to look for creative activities on the net and try to see how to implement them in the coming lessons (**TB**: from the questionnaire)

This was the second EP experience she had conducted independently during the next two months following the first experience.

For **TA**, having engaged in two other EP experiences, she used a ‘goal setting’ activity with her students as she investigated her puzzle of why her students were not doing their homework? (appendix 9, p 145) According to most of her students’ answers, she understood that her students were overwhelmed by their preparation for the baccalaureate exam; consequently, they fail to set organized goals for their preparation and set their personal goals adequately. Thus, doing homework became an added pressure and stress to their preparation for their final exam. These results, she wrote, made her think of the importance for her students to start setting achievable goals for their learning even if it was a bit late. She stated: “the final term was about to finish and we had only 4 weeks left, but still I tried to think of engaging them in a personal goal setting activity before it would be too late”. Expressing how she improved her practice attempting to help her students with their learning, **TA** wrote:

For the remaining 4 weeks, I asked them to set weekly goals for their learning and preparation for the BAC which could help them become more organized and more relaxed with their learning. (**TA**: from questionnaire)

2.1. Improved teachers’ practice led to improved students’ performance

As they further engaged in EP experiences, Teacher A and Teacher B could observe an improvement in their students’ performance. After changing their practice, these two teachers were able to cite specific examples of students’ progress; **TA** simply stated:

“...I noticed that this practice (personal goal setting) made them more interested in learning and showed me that they were challenging themselves to achieve their goals”

Likewise, **TB** stated:

“...I have noticed that their preparation of the current unit presentation increased, they showed willingness to try hard at least and were trying to follow the instructions of the presentation course”

TB's students' progress was the result of her investigation of why her students were not doing their oral presentations by the end of every unit? (appendix 11, p 153) After deep understanding of the reasons of what was puzzling her, she, with the help of her students decided to set guidelines to tackle the issue of oral presentations which resulted in increased students' willingness to prepare for their presentations. She wrote:

After the investigation, we found it beneficial to set some guidelines for the issue of their oral presentations. Implementing a course on oral presentation skills, freedom for topic selection as well as peer evaluation to have the audience interest (TB: from questionnaire)

2.2. Using student data instead of intuition

On several occasions, the teachers in this study expressed their enthusiasm about relying on concrete data from their students, ultimately resulting in the fact that their decisions are made less intuitively. For instance, TA said:

...it is not just as it used to be like theory, I mean not only talking about thoughts or let me call them assumptions... this time it is true: we have true data and we are reflecting and analyzing data so as to understand and so as to decide maybe to make some right decisions of course (TA)

Data based decisions can become more the norm when considering efforts to improve schools. TD argued:

“I think that teacher research projects in our school can result in right and appropriate decisions and suggestions which are data driven that can really recover our schools”.

Freeman (1998) confirmed this “disciplined” approach rather than an “intuitive” approach to decision making.

2.3. Considering learners' idiosyncrasy in teaching

Both Teacher A and teacher B expressed that reflecting on their students' puzzles helped them recognize how much every learner is different from the other, eventually resulting in considering and respecting their uniqueness in their teaching practice.

TA for example, explained how she and her colleagues used to talk about their pupils as an undifferentiated mass before the EP experience. She indicated:

"I remember before, we were always talking about students as a mass of classes...I have never thought of my students as this person and this person. When I talk about my class, a foreign language stream class, I do not say mister or missis, as a unique boy or a unique girl".

However, during their reflection on students' puzzles, **TA** said:

"but this time oh my god! We were analyzing each person on his own".

As a consequence of analyzing every student's puzzle on its own, **TA** now knows enough about her learners to understand just how idiosyncratic they can be and thus deal with them in better ways that satisfy their individuality. In her own words, **TA** expressed:

I could learn that students are not all the same, everyone has his own preferences, his circumstances so when we get to know them this way, before planning any lesson I can know how to do that. I can now compare... (**TA**)

TB had the same view with **TA**. Having engaged in EP in her first experience, she can now understand her pupils as individuals, she also commented:

...it was very helpful to take time reading and understanding my pupils' puzzles and this way helped me know my pupils as individuals... (**TB**)

Teachers' words above resonate well with the work of Naidu et al. (1992) who make a strong case for the benefits of fostering learner heterogeneity in the classroom. By accepting learner individuality as an unavoidable factor in any classroom, the teacher might be in fact improving learners' performance:

“We realised that heterogeneity is the natural result when many minds are trying to come to grips with an idea through dialogue. Given the uniqueness of our learners (and of human beings in general) any expectation of homogeneity would be unreasonable”. (1992: 260)

The teachers’ statements about their awareness of learners’ idiosyncrasy also resonate well with one of the expected outcome of the EP workshop: respecting the idiosyncrasies of learners and the uniqueness of contexts in the teaching process. (see chapter 2, p 60)

The participants improved their practices because of what they learnt about their students while engaging in exploratory practice. The teacher researchers in this study changed their practice or intended to change it in order to align it to what and how their learners needed to learn. This echoes Nancy Atwell’s powerful statement: “Educators who learn in their classrooms, who conduct research and write about their observations, become the best possible teachers, thoughtful about how students learn and how they can help” (Nancy Atwell, as cited in Roberts, S, K et al, 2010).

This arrangement in their teaching practice was a direct consequence of the deep understanding that they got through reflection and analysis of their learners’ qualitative data. These teachers recognized the power of their new understandings about their learners and decided to act on that new knowledge in their future practices. This resulted in evidence-based decision making to minimize students’ needs.

The participants did not simply rely on their intuition, this was clearly stated in teacher B’s words:

“...this principle of EP which is ‘understanding’ helps to take intelligent decisions in the classroom; once the teacher gets deep understanding of any situation that he encounters with learners, this way, when I decide about any new implementation or how I treat my learners so it is a decision that has been well-thought before through understanding, not based on no evidence”

TB.

2.4. Systematized reflection

Data from the teacher researchers in this study revealed that exploratory practice supported teachers move beyond the standard reflective competence of teachers providing them with organized research steps to enhance and systematize their ordinary reflection. **TD** for instance explained how the inquiry stimulated him to question the type of reflection he used to go through in his teaching:

“I have always been reflecting on my work. But the question is: what kind of reflection is this? It is just a kind of thinking about how my teaching day was once I get home under a shower or taking my cup of coffee of the afternoon! I am now aware that this kind of reflection and curiosity is actually not sufficient for my professional growth.” (**TD**: from the questionnaire)

In another instance, **TD** describes how his reflection before doing EP was informal and didn't exceed the level of tacit thinking:

“my reflection before doing EP was just like informal activities which had no form and shape...”

After his EP experience, **TD** realized that his reflection became more systematized through the process of collecting and analyzing data. He said:

now I come to [...] let's say find a tool to systematize my reflections, let me just explain this idea (...) you know, I used to think about my teaching and talk to colleagues about it too, I used to think or tell a colleague that "My lesson went well" or "My students didn't seem to understand" or "My students were so badly behaved today." However, without more time spent focusing on or discussing what has happened, I may tend to jump to conclusions about why things are happening and that [...] EP therefore implies a more systematic process of collecting and analysing our thoughts and observations
(**TD**)

TC and **TB** agreed with **TD** and in similar ways, they stated:

you know, as a teacher it is natural to think of what has happened during the day once you get home, but now I understand better the difference between casual thinking or reflection and when you do some effort to think and understand the events that [...] this needs action, some action like we have done here in the EP experience ... (TC)

I was curious about things that bothered me a lot and most of these issues are related to my pupils like for instance [...] many things, but it was just a simple and isolated thinking... But now EP provided me with the process and steps to arrange my thinking or my curiosity and move to an action to understand something about my classroom (TB)

TB's statement above is most likely related to the notion of 'reflection-in-action' where thinking and doing become complementary in the reflective practice of teachers: in "reflection-in-action," "doing and thinking are complementary. Doing extends thinking in the tests, moves, and probes of experimental action, and reflection feeds on doing and its results. Each feeds the other and each sets boundaries for the other" (Schön, 1983, p. 280).

It is possible to imply from the teachers' experiences with systematized reflection that the process of gathering data developed their reflection and gave it more value: "although reflection is a valued quality of effective teachers, even when based on nonsystematic memories of events or casual observations, the value of reflection is increased when based on data collected through systematic observation and data collection procedures" (Lederman and Niess, 1997 as cited in Parsons, R, D and Brown, K, S, 2002). Teachers' engagement in exploratory practice helped them accompany their tacit thinking and retrospective analysis of their performance with doing and action; these two processes together, in Schön's terms, form the core professional artistry of the reflective practitioner.

2.5. Confidence and courage in teaching

Participants also found that their experiences with EP have increased their confidence in teaching and their courage to try new ideas in their classrooms. They

reported that doing research had helped them develop more confidence in their capacities as teachers. They consequently felt a greater sense of control over their profession and thought they were more effective in dealing with situations that arise in their classrooms and in understanding their learners and their teaching environment better than before.

TB felt that she is more equipped now than before in dealing with difficult situations that might arise in her teaching and this made her feel more confident:

I feel more confident because I now have a tool that can help me research and look for understanding my classroom problems and puzzles; it feels like now I can do something to face my classroom problems (**TB**)

TC, likewise, felt confident and proud after conducting her first EP experience, that she tried something new in her classroom and that she is now able to develop more innovative material for her students:

...when you try something new in the classroom, and it just works, you are like confident in your capabilities and convinced of your abilities to develop materials which can be innovative and attractive for your students (**TC**)

In a funny way, this teacher compared her EP experience to a ‘stop and consider’ sequence in the English Textbook. She described how the experience boosted her confidence in teaching as it was a moment of taking a while and considering what was and what is going on in the classroom, therefore, after this ‘stop and consider’ while, a teacher could take up teaching more confidently because he now knows himself and his classroom better. Humorously, **TC** stated:

...I became more familiar with what was going on in the classroom (...) what was going on while we were running together to finish lessons, activities, assessments and exams, so it was like stop and consider (laughter) like the sequence we have in our text book “stop and consider” (laughter) so we like stopped, you know it was much more like when someone is running, and then he stops for a while to take a breath to carry on running, but when he runs

after taking a breath, he runs more confidently, he gathered up his strengths during that while (...) it was like that, EP for me was like a moment of 'stop and consider' (TC)

TD, in his second EP experience (appendix 12, p.155) also reported an increased sense of self-confidence. He wrote in his questionnaire that finding answers to what was puzzling him made him more confident regarding the decision he took after the investigation:

...I also become confident about the decisions that I take in the classroom in a sense that for instance; talking about my investigation of 'cooperative learning' I was already aware that collaborative and cooperative learning techniques augment students' motivation and interaction ... the results that I got from students' interviews encouraged me to use more of these techniques as long as their advantages outnumbered the disadvantages as expressed by my students (**TD**: from questionnaire)

This suggests that after confirming that cooperative learning was beneficial for his students' learning, **TD** might continue using this strategy in his teaching with more confidence and trust.

Teachers' increased confidence in teaching as a result of engaging in EP in this study corroborates what has also been concluded from analyses of researchers' self-reports across the world that teacher research boosts teachers' self-esteem and confidence levels (Dadds, 1995; Loucks Horsley et al, 1998 as cited in Zeichner, 2003).

Teacher D and Teacher B also reported that engaging in EP gave them the courage to try new things in their classrooms which for **TD** was a risky business that threatens the stability of the traditional structure of the classroom. **TD** reported that it was worth diving into the unknown without being afraid of the risks that this might engender, he wrote:

It is always a risky business to employ unfamiliar activities that in some way might break down the traditional structure and environment of the classroom,

but at the same time, I think that when a teacher does research and gets dependable results from students' data, the risky business becomes much more a question of courage... (TD: from the questionnaire)

Working with the EP notions of 'puzzlement' and 'working for understanding', TB along her students, discovered the courage of asking sincere 'why' questions about their classroom lives. With this courage, they came to accept the possibility that questions are indeed worth asking to address issues of importance to their quality of classroom life:

Now, I am working with the principles of EP (...) I mean the ones of 'puzzlement' and 'working for understanding' gave me and also gave my pupils the courage to ask genuine 'why' questions about the classroom life that we share. (TB)

3. Examination of teachers' beliefs and assumptions

In discussing how the research experience enhanced teachers' professional development, all of the four teachers specifically mentioned that they saw EP as a tool of systematically testing their beliefs and instinctive understanding of practice. Research based knowledge, they thought would enable them either correct their implicitly-held theories and assumptions or prove them.

Expressions such as: "I used to take for granted", "I used to believe", "I have never thought that", "I couldn't know before" were frequently used by our participants in this EP project. This might suggest changes in their beliefs and assumptions. For example, TC stated:

"I thought that my praise would be encouraging for him...but when I read what he wrote about this puzzle, I was like: "what! Praise is bad!"

So this teacher used to regard praise as a good practice with one of her students, however, when she saw how this practice was disturbing him, she thought that she was not doing the right thing and eventually revised her behavior with him.

TB had the same story with change in her previous beliefs about her practice. After her investigation of the puzzle: “why don’t my students do their oral presentations by the end of every unit?” (appendix 11, p.153) during her 3rd EP experience, she realized that she was taking it for granted that since her students are practicing speaking and communication skills so they are capable of doing their oral presentations. What she discovered after her work for understanding caused her to change this assumption and realize that they actually need assistance and that practicing communication and speaking skills in the English courses does not necessarily help them to prepare for their presentations. She wrote in her questionnaire:

Researching my own practice also helped me dive deeper into some of my classroom realities that I used to take for granted; for example, I used to take for granted that since my students are having courses in speaking and communication skills so they can do presentations. The research helped me know that my perceptions are not necessarily true. I had to help them acquire presentation preparation and delivery skills (**TB**: from questionnaire)

Data from the questionnaires revealed that EP didn’t only serve as a tool to change teachers’ beliefs, but also as a way that helped participants validate some of their previously held assumptions. While **TB** and **TC** changed their assumptions about some of their practices as a result of doing EP, the results that **TA** and **TD** got from their puzzles’ investigation confirmed their beliefs. This was clearly voiced through the following statements:

“This research helped me confirm my beliefs about the importance of cooperative learning in an EFL classroom. Before I have done this investigation, I used to think of cooperative learning and group work as a beneficial learning strategy and fortunately the results of the study proved that “(**TD**: from questionnaire)

“Investigating why students were not doing their homework by the end of the year, kind of brought back the same perception that I had about my students

at the beginning of the year: that they are not setting personal goals to facilitate their learning. But the difference between the two situations is that at the beginning of the year, I just had a normal thinking and supposition about my students, but now after doing EP, I confirmed the supposition was true” (TA: from questionnaire)

Although it has been implied that beliefs are difficult to change (Woods, 1996), Kumaravadevelu, 2001 claimed that engaging in systematic research about teachers’ practice is a powerful tool for bringing about change and development in teaching as it examines and affects teachers’ perceptions, beliefs and values about their own teaching. The findings above concur with these claims advocating that exploratory practice might be an effective tool that prompts teachers to examine their teaching practices and question their previously held beliefs and assumptions.

4. Appreciation of community and renewed sense of collegiality

Comments from the teacher researchers revealed a pattern of appreciating collaboration and community that the first EP experience (EP pilot) engaged them in. These included:

“It was great to meet and do something together” (TA: from the interview)

“Sharing my reflections and puzzles with colleagues also renewed that sense of partnership that we missed for so long” (TB: from questionnaire)

“this time our meetings, even though, we didn’t meet several times, but the meetings were structured and focused on a shared experience and that was motivating” (TC)

“I am happy that the spirit of the group has been revived on us and you know, it has been triggered by a teacher research project and I had even a chance to meet you and other teachers from another school” (TD)

The participants explained that EP improved their collaboration as it provided them with another good reason to meet for contrary to their previous situation where they only collaborated to prepare for exams:

...we are used to meet together only before exams to decide about the subjects of our exams and decide about who has to do what and what. The experience of research gave me another reason to meet with my colleagues and discuss about my research experience (TA: questionnaire)

TB felt the same thing as TA:

...since we were sharing the same experience so now we have something to gather for, I mean, it is like (...) how shall I put it? It is like you [...] previously; we had no specific purpose to meet for except when we had to meet to prepare the term exams do you get me? (TB)

Further supporting this finding of collegiality and collaboration, some teachers also reported that sharing the experience of EP has improved their collegial conversations as they noticed that they began to talk more specifically about research results concerning their teaching rather than about arbitrary topics. This could find an illustration in the following quote:

“this collaborative reflection, I think, is more fruitful than the simple and messy discussions and conversations that we are used to have whenever we meet in the staffroom...whenever we meet in the staffroom to look like a collaborative team who are working together, then all we do is to speak about this and that and that’s all (...)“(TB)

Participants of this study reported that they favored professional development that is focused on sharing of ideas and collaboration between colleagues. EP then, helped them find their passion as it gave them reason to meet and learn together, thus offering a strong sense of community.

5. Teachers’ perceptions about EP as a contextualized, owned and sustainable approach to professional development

In fact, ownership and contextualization were quite frequent in participants’ responses concerning EP as an approach to their professional development both in interviews and questionnaires.

5.1. Ownership

When asked directly in the questionnaire about what kind of in-service training the participants find more beneficial. Our four participants agreed that doing teacher-research through the framework of EP was a more controlled and owned professional development by the teachers than traditional seminar professional development. Their responses to this question also revealed that they were not against workshops and seminars and they think they are useful, for instance **TA** sums this attitude up when she wrote in her questionnaire:

“I used to read professional articles and journals when I was a student at ENS, and I also attend workshops and seminars for my professional development. Before my introduction to this type of teacher research, I have never questioned the usefulness of these approaches for my professional development and I still don’t”

However, teachers in this study reported that traditional professional development doesn’t not allow them grow and develop as autonomous learners who can decide about what and how to do during the professional development activity. **TA** compared their current model of professional development with EP:

...I come to learn now that sometimes, just attending a seminar and workshop is not that sufficient for the teacher to develop as an autonomous learner; for example, I cannot decide about the content of the seminar and relate it to my personal teaching experiences whereas when I did research, I was able to decide myself about the issues that I needed to know about ... (**TA**: from questionnaire)

Data from interviews revealed parallel perspective about EP. **TD** for example outstandingly stated that EP raised a sense of autonomy and proprietorship of the professional development activity claiming:

...because doing teacher research, the initiative comes from the teacher, in other words, the teacher is the one who controls and owns the process

compared to the seminars that are imposed by professional contract on us...
(**TD**)

This idea of ownership was further revealed when **TB** said:

“...the EP process was driven by me and my learners rather than by an expert or the administration...” as illuminated by the interview, this teacher not only simply referred to EP as an owned and controlled professional development activity, but she further directly related it to encouraging teachers’ sense of professionalism and expertise. In her own words she said: “I think that by virtue of owning the process, the teacher may feel himself as an expert who knows what he is doing...and this is what I mean by ownership that stimulates a real sense of professionalism and expertise...”

Teachers’ statements above may well put forward that in the same way that our educational system has been reformed over last years to give learners high levels of autonomy and control over their learning experiences, teachers are equally supposed to enjoy high levels of professional ownership and autonomy over their professional development which might be realized through engagement in teacher-research such as EP or other reflective approaches to professional development.

5.2. Contextualization and relevance

Along with ownership and autonomy, teachers talked about how EP provided them with a contextualized professional development which linked to their local teaching contexts and which was of immediate relevance to our participants and to their learners as well. For example, **TD** stated:

“we found possible answers. The answers were contextualized because they came from my students and this is very interesting feature of the research experience that we did; the process is not decontextualized but directly pertinent to the persons who are learning and developing their professional growth”.

Under the idea of contextualization, two participants (**TB**, **TC**) believed that EP being a contextualized and relevant approach helped them meet their specific professional development objectives and needs. **TC** expressed:

“when the professional development activity is initiated by the teacher himself at his workplace, so he sets specific objectives for his professional development, for example, I can choose to investigate the puzzle of “why don’t my learners use their dictionaries during the English class”, so see, here is an objective that is directly related to a problem, or a puzzle that really exist in my classroom...”.

Sharing this opinion with **TC**, **TB** stated:

“...I also realize that when I did research, I focused on issues that were related to my professional needs. I decided about what to investigate based on my needs”.

This finding of our study sounds in line with Guskey (1995, as cited in Hunzicker.J. 2010) who mentioned that teachers deem professional development relevant when it directly addresses their specific needs and concerns.

Additionally, our participants believed that engaging in research experiences under the framework of EP helped them realize that the classroom is the most genuine place where professional development should primarily take place. **TC** stated that it becomes easier for her to implement what she learns from a professional development activity when her learning takes place in the classroom, she declared:

“when you rely on a classroom inquiry, especially a one that is inclusive and integrated like EP, it is easier for me to relate ideas because they are learnt in a genuine environment, so when you come to changing a practice or implementing something, it just fits...”.

While **TA** simply stated that the classroom and the school are the appropriate places where teachers should look for solutions to their professional problems. The following quote illustrates her opinion:

...I think that the school and the classroom are the suitable place for my professional development to occur because if something is going on wrong in our workplace, solutions can only be investigated in the same place where they emerge... (TA)

Negative experience with EP: the challenges and constraints that teachers encountered during their EP experiences:

In addition to the benefits that engaging in exploratory practice have for the teachers’ professional development, the participants also highlighted some of the challenges faced in relation to their EP experiences. Some of the challenges were classroom based whereas others were related to research skills and school environment. The teachers also provided suggestions that they valued important to deal with the constraints that teachers might encounter during teacher-research engagement based on their personal experiences. The table below lists all the difficulties faced by the participants with possible suggestions of how to deal with them:

Constraints:	Suggestions
<ul style="list-style-type: none"> • Time constraint • Lack of research skills • Lack of school support and recognition • Classroom-based constraints 	<ul style="list-style-type: none"> • Protected time dedicated specially for teacher-research activities • More training in teacher research methodology and mentoring • Administrative support from school • Introducing the concept of teacher-research to other teachers of the district and sharing research experiences

Table 3

1. Time constraint

Without exception, all respondents identified time as the key facilitator to do teacher research. Consequently, lack of time was the primary challenge which the participants experienced doing their EP experiences. Nevertheless, they explained that the EP principle of ‘integration through the use of familiar classroom activities’ seemed so promising regarding the issue of time; some of them didn’t relate this challenge to EP as an approach to teacher research as long as the work was integrated. They all identified the lack of “covered time” to do research as the foremost barrier, this is in line with Watkins’s (2006) findings, even though teachers possess the necessary research skills, they are seldom given the opportunity or time to engage in research project.

The participants claimed that they are indeed fully occupied by those daily tasks of teaching and making assignments. In addition to this heavy workload, they claimed that doing their EP experiences under no official time coverage caused them a kind of pressure. As **TB** pointed out:

This made my work for EP compete with time needed for lesson preparation and grading. And you know we are always under the pressure of completing the examinations and the test-oriented syllabus. So, the lack of official time to complete the research work stressed me a bit (**TB**)

Likewise, **TA** felt the same pressure claiming:

The first thing that came to my mind when you have asked me to do EP in the classroom was time, I was afraid, you know that we are obliged to complete the programme, especially with 3rd year classes, we have to do tests, evaluations, exams, corrections and other things. The issue of time is always a problem (**TA**)

While **TB** found that EP as an integrated approach of teacher research, doesn’t take a lot of time and that all what is needed for its completion is an official time dedicated for its practice:

“EP as an integrated research doesn’t really consume a lot of time but you know as long as this practice is not done under official time allotted to its performance so this remains a pressure”

TA argued that even with it being integrated with pedagogy, it still requires extra time: “Let’s say that I did not think that it would be easy just like that because it remains research even if it is integrated with pedagogy, but it still requires a kind of planning, time for reflection, analysis and discussion with colleague”.

On the other hand, **TD** had a different view concerning the issue of time as he related it to EP being a new experience that he and his students engaged in for the first time. As a consequence, it took him time to get his students fully engaged. When he was asked if the research was time consuming, he stated: “...to some extent, you know, because for me you know, it was the first time that I do EP in my class” he further explained this as following:

It took some time to explain to the students what they were supposed to do. Although it, you know, the method of doing EP was familiar to us , but the topic was different that’s why we needed more time to make things clear for the students and also it took me time to discuss the puzzles with the students because you know, it consumed some time (**TD**)

Saying” the method of EP was familiar to us” **TD** probably meant that the process of implementing the research being done through familiar classroom activities was not time consuming as they didn’t have to conduct it using unfamiliar and extra procedures that would set them away from their daily business and consume important time which is supposed to be dedicated to pedagogy. Thus, he seems to agree with **TB** claiming that the method of doing EP was not what they meant by time as a constraint as **TD** related it to EP as a first experience and **TB** to the lack of official time to conduct the research.

A lack of time might also impact on the quality of research done. **TD** noted:

“I had many things to do during the last term of this educational year, I had to teach and to prepare for my MA research so sometimes I was not present

at the school because I had to see my supervisor for my academic research and once I come back to work then I try to do my best to catch up my absence especially with 3rd year classes...So I lacked time to properly plan for the EP research and to revise and respect the EP principles” (TD: from questionnaire)

2. Lack of research skills

A deeper investigation of the challenges that the teachers faced during their research experiences further revealed that they also lacked teacher-research methodology skills. Despite the fact that participants recognized the importance of the EP workshop that they held before their engagement in research, they felt that they still lack knowledge about this approach to effectively conduct it in their schools: “the workshop helped us a lot, it explained to us the necessary guidelines and the EP case studies we discussed during the workshop were very helpful (...) actually I found it amazing when attending the EP workshop, in a way that it gave me some great ideas on different ways to conduct the research in my classroom and also strategies to use during my teacher research process ... but I think that I still do need more exercise and to know more about it” (TD)

They generally reported that there was neither training provided by the school, nor did they acquire teacher-research skills during their pre-service training: “I don’t remember that we have been introduced to this topic at all when I studied at the High School of Bouzareha” (TB). Hence before the EP workshop, our participants were neither well-prepared nor motivated to initiate teacher-research experiences in their classrooms. This explains the reasons for the lack of their research skills. This constraint was highlighted by our participants as follows:

“...the matter of having the skills of research, I mean it’s just that I am not qualified enough in the field of teacher research” (TA)

TB and **TD** made similar remarks that:

...to be able to successfully do EP we need to equip ourselves with sufficient knowledge of it; so I think that I am still not quiet qualified do it, you see?
(**TB**)

One of the problems I faced is the knowledge about doing research; I mean the methodology (**TD**)

3. Lack of school support and recognition

The respondents commonly highlighted the importance of principal support and recognition to enhance the effectiveness of teacher-research engagement. The participants perceived that there was inadequate support from their school principals in relation to the work they were doing. As a result, it had affected their motivation and made them feel frustrated during their teacher-research experiences. This is evident from the following quotes:

The indifferent attitude of the school principal discouraged me too (**TA**: from the questionnaire)

...in my EP project, I didn't gain any help from other persons who are supposed to help except the researcher...they (school principal) were happy for the fact that some teacher research project was going to take place in the school, but they did never come to talk to us later on (...) I mean, just allowing us to conduct research projects like this and showing interested faces is not enough...I felt that I was doing something irrelevant to the school policy... (**TD**)

These statements indicate that the attitude of the school administration towards teachers' initiatives for professional development didn't change after participants engagement in a teacher-research project. The participants indicated that their principal's attitude remained the same as it was before any obvious efforts could be taken by the teachers for their PD. This was clearly stated by **TB** as follows:

“...honestly speaking, for a moment, I felt as if my job in this school is only to teach, teaching is the only effort that is recognized by other staff members,

and that doing research is not a priority, this influenced my motivation ... you know, nothing changed, the attitude of the administration was still the same ... “(TB)

In addition to the lack of principal’s support, **TA** reported the lack of cooperation from the other colleagues and their unwillingness to participate in the EP project as constraining the power of collaboration that they were expected to have if they had all participated in the research project. She wrote in her questionnaire:

...it was dreadful not to exploit all of the team in the research because many heads are always better than one for coming up with ideas; we would have created a high team spirit if they had all participated (TA: from questionnaire)

4. Other constraints (classroom-based challenges)

Responses gathered from the participants from both interviews and questionnaires showed that in addition to the other constraints which were highlighted above, they also raised some other concerns that affected the quality of their research experiences. These were mostly classroom-based such as crowded classrooms, lack of some students’ motivation as well as the level of students’ in English.

The four participants indicated that the size of their classrooms presented them with a problem. **TB** for example simply said:

“unfortunately, this matter (crowded classrooms) is affecting the quality of the teaching and learning, and here again, it also affected the quality of our EP experience. Because of the large number of pupils, it was hard for us to investigate all their puzzles”

Others expressed similar sentiments by saying they struggled to:

“discuss all the puzzles, because with the number of students in the classroom, we couldn’t discuss and explore all of their puzzles” (**TD**).

Hence, they expressed their preference of small size classrooms for a better quality of teacher-research projects:

you know that the majority of teachers share the belief that those students who experience a smaller classroom environment receive a better quality education (...) I am saying this based on my long and rich experience in teaching so if we assume that small classrooms receive better quality of [...] this can also be applicable to receiving any new approach like this one of teacher research (TC)

More explicitly, **TB** stated: "...I mean I liked the fact that they (pupils) were all engaged, but I suppose that this would have been manageable if the number of pupils was at least less than 20"

The teacher researchers also highlighted students' low level of English proficiency as a constraint. For instance; **TC** pointed out: "the students' English level was the first challenge I had to meet during the implementation of EP" she explained that: "I mean here that not all students can easily express themselves in English ...so not all students used only English writing about their puzzles or during the group discussion that followed"

TD also mentioned students' low level of English proficiency as a barrier; he expressed that it was difficult for him to help his students deal with their puzzles in English. His comment was as follows:

... some of them don't even know how to construct correct English sentences. They needed help from me of course. Some of them don't know [...] asked me if they could explore their puzzles in Arabic...so I had to help them, correct them and monitor them to write correct sentences in English (**TD**)

Moreover, two participants also faced the barrier of lack of students' motivation. This issue was not talked about in the same way by these two teachers; while **TA** spoke about some of her students' lack of motivation to participate in the EP experience as a constraint, **TB** referred to students' lack of motivation to learn English in general relating this to her research-experience. The following comments are representative of these participants' views of this issue:

The other issue was the one of realizing that the students who are used to stay speechless in the classroom and not participating in classroom activities acted in the same way during the EP experience... I noticed that the experience didn't change or motivate them a lot so I had to do efforts to push them engage in the research... it costed me an arm and a leg to make them try...(TA: from questionnaire)

you know that our students lack that personal motivation to learn and speak English because they have no real purpose or opportunity to do that (TC)

When asked about how she considers this as a barrier that she faced during her research experience, TC replied:

yes, it's all about that; because when it comes to trying something new in the classroom with the objective of improving the English class so there will be the question of students' motivation facing you... it's the same thing; when students are not personally and internally motivated in their English learning, it becomes difficult to motivate them do other things like research (TC)

Suggestions for a better teachers' engagement in EP

The following section includes some solutions that were suggested by our participants for a better engagement in teacher-research projects. These suggestions were based on the challenges that informants encountered during their EP experiences.

➤ Protected time dedicated especially for teacher-research activities

All the teachers in this study argued that they need more time to become successful teacher researchers:

“I will say that to do a good research and to be a successful teacher researcher, I think one should take enough time, because I need to dig deep to the situation that I intend to investigate...for other experiences and if we want them to be more focused we need sufficient time” (TC).

So the participants in this study suggested protected time dedicated especially for teacher-research activities. This is evident from the following quote:

It would be great to create intended opportunities for teachers to engage in research like: providing time table sessions for research right from the beginning of the school year, for instance, official recommendations to conduct research once a term or something like that. I think that this way teachers won't feel like they are taking the time of the completion of the programme even though the research is integrated (**TB**)

The comments made by these participants might indicate that time is an important determinant to successful teacher-research projects. This finding was further substantiated by Cochran Smith and Lytle (1993) who observed the need for more time if teachers were to undergo research activities. They stated, "Teaching is a profession in which it is extraordinarily difficult to find enough time to collect data and it is almost impossible to find time to reflect, reread, or share with colleagues" (p. 91).

➤ **Training in teacher-research methodology**

A conviction among the participants was that training and mentoring play a critical role in facilitating any teacher-research enterprise in a school. **TB** observed:

"if EP is to be conducted as a form of teachers' PD, then I propose that teachers are appropriately trained by professionals, it would be amazing that trainers commence a programme of EP workshops that are designed to cater the needs of teachers concerning skills and abilities of conducting teacher research"

likewise, **TA** emphasized:

"I would like to suggest training first, I mean training teachers to do it and how to do it, this is very important, because if you just do not know how to gather data from learners and how to analyze them, you cannot start any initiative of teacher research, I guess"

In addition to training, our participants suggested supervision and evaluation of their research experiences. **TD** supposed that:

“research is useless when it is not evaluated by mentors and experts” (from questionnaire)

TB also proposed supervision for more productive teacher-research experiences, like **TD**, she supposed: “I think that if teachers are supposed to produce a good quality of teacher research projects, we should get a chance to be well supervised so we are not in a helpless situation if we have a problem with our project”.

However, data from the participants lacked clear indication about how teachers would receive their training on teacher-research methodologies. They most likely wanted training to be through a professional body. **TB** spoke about the need for guidance from research experts for beginning teacher-researchers: “I also consider that for the feasibility of EP, schools could not work in isolation from other institutions or research experts, especially if they will be experiencing it for the first time. It does not at all seem easy without training...” in the same way, **TA** stated: “...I think I need more training on this and maybe from experts in the field of teacher-research...”

➤ **Administrative support from the school**

A recurring suggestion was that the head of the school and school administration play a crucial role in the development of a school culture that motivates teachers to conduct research in their classrooms, but most importantly to encourage their long-term commitment to this approach for their professional development. **TD** said that:

...this approach for our professional development should include supporting schools in using data on student and analyzing them (...) so I think that without support and motivation, the approach wouldn't sustain, teachers and schools would just give up in the absence of encouragements on the part of education authorities (**TD**)

Similarly, **TB** stressed recognition on the part of the school principal as essential to assist the teacher researcher in implementing the research in a continuous way. She emphasized that:

“...school principal should show attention for the teachers who are doing research, they should not act indifferently (...) because this attitude certainly discourages teachers and might cause them discontinuation of engagement in research”.

While a strong leadership from principal, supportive to teacher-research was viewed as a facilitator, conversely and more realistically, respondents in some way justified the lack of principal’s support claiming that many school leaders might not be proficient at leading a research enterprise in their schools as long as they do not know much about it. Thus, encouraging teacher-research is not one of the principal’s priorities yet:

“...so as not to be so unrealistic, I know that teacher-research generally and EP as a specific interest is not yet the principal’s and education authority’s business (...) so before I could talk about lack of support and supervision, Inspectors or any related professionals should be appointed by education office so as to [...] I mean to do the task of training, support and supervision...” **TD** stated.

➤ **Introducing the concept of teacher-research to other teachers of the district and sharing research experiences**

Respondents talked about the importance of introducing the concept of teacher-research to the other teachers of the district, believing that this also helps to facilitate teacher research in schools:

“...I think that at this stage, a large number of teachers still don’t know about EP, so I think that it is time for Inspectors to call for seminars to introduce teacher-research and EP to the teachers...”. (**TD**).

TA seemed to agree with **TD**:

“I also suggest introducing EP for all the teachers of the district in a seminar, because I think that sharing this concept of “teacher research” with other teachers will be very beneficial...” (TA)

This could also take the form of developing “a school culture among teachers in which continued learning through research is considered an essential aspect of professional practice” (TD), he thinks that:

“emphasizing this goal at institutional meetings, upon hiring new teachers, and during formal and informal meetings with teachers would be so beneficial and boosting”.

The teachers in this study spoke about the importance of introducing the concept of teacher-research to other teachers as they believed that:

“like this we will be able to exchange our teacher-research experiences and learn from each other” (TA),

This teacher also believed that introducing the approach and sharing research experiences with other teachers will act as a sounding board for beginning teacher-researchers and breaks the feeling of isolation that teachers could experience when they engage in teacher-research projects alone. She argued:

“...this (introducing EP and sharing experiences with other teachers) will help the teachers who are willing to start an EP project in their school to feel motivated and supported by the institution and not witness that feeling of isolation and frustration which I felt by moment during my EP experience” (TA)

TD further emphasized the importance of sharing teacher-research experiences with colleagues. He wrote:

“it (teacher-research) remains sterile when it is not shared with others and when other colleagues cannot learn from it and use it as inspiration” (TD: questionnaire).

Though a common perception among our participants was that there is value in introducing practitioner research to other teachers and to get them well trained on how to conduct it, yet **TC** and **TD** seemed less optimistic about the possibility of translating this intention into realizable action in schools on a short term. These two teachers believed that teacher-research is a big commitment, requiring a lot of time and effort on the part of all the stakeholders in education to get it started and sustained in our schools. **TC** said:

this idea of introducing this approach to many teachers and to start implementing it in schools and keep supporting it (...) it will take time and it needs a serious commitment both from teachers and all education stakeholders (...) it seems to require a lot of energy, patience and time (...) we have got to attend trainings, to really meet other teachers and to share our experiences and you know this is not something easy ... (**TC**)

TD concurred stating: "...you know, it needs to be like a 'roll up your sleeves and wipe the sweat off your brow' if we really need to succeed it and get trained on it"

3.2. Section B: Longer commitment of the teachers to EP

In this section, we shall present a discussion of the longer commitment of the participants to doing EP. Reasons to why (or why not) they continued doing EP are presented from the analysis of the questionnaires, thus we shall attempt to answer RQ3 of our study in this part of the dissertation.

A report about each participant who continued using EP as an approach to his/her professional development will be presented in appendices, pp.144-158 as we believe it is crucial to know how our participants investigated other puzzles (after the 1st experience) for a better understanding of their longer commitment, but also for a better understanding of the analysis that has been presented in the previous section. The report of each participant is developed from analyzing each individual's questionnaire. The reports depended on the followings: the nature of puzzles, the level of understanding and following the principles of EP (procedures of the investigation) and the teachers' reflection on the research experiences. Questionnaires are used to tell how each teacher

progressed in the research; what puzzles she/he investigated and what procedures she/he followed during the investigation.

The table below represents how many times the participants engaged in other EP experiences and the type of puzzles that they investigated:

participants	Number of puzzles	type of puzzles
TA	02	<ol style="list-style-type: none"> 1. Understanding L1 use in the classroom from the students' standpoint. 2. Why don't my students do their homework?
TB	02	<ol style="list-style-type: none"> 1. Why do my students become disinterested by the end of lessons when I ask them to recapitulate what the lesson was about? 2. Why don't my students do their oral presentations by the end of every unit?
TC	00	00
TD	01	<ol style="list-style-type: none"> 1. What are my students' perceptions of cooperative learning?

Table 4

Detailed discussion of how the teachers investigated their puzzles will be found in the section of appendices (pp.144-158)

3.2.1. Reasons that participants offered as to why they engaged in or didn't engage in other EP experiences

After the first EP experience, three teachers independently continued to enquire into their own practice. TA, TB and TD made conscious decisions to do other EP research experiences. TA and TB were each involved in two more EP experiences while TD engaged in only one EP experience. TC didn't engage in further EP research after the first one.

Why did TA, TB and TD choose to continue doing EP?

These three participants admitted that continue to do EP beyond the first experience (EP pilot) was a means for them to work for their professional development as they all recognized the importance of doing research for their professional learning. For example, **TB** observed:

“I have done two other EP experiences because the first experience opened my eyes to the importance of teacher research for my professional development.”

Data from questionnaires collected from all of **TA**, **TB** and **TD** revealed two different reasons which motivated the participants to continue doing EP. One was in terms of its nature and process, that is, in terms of the methodological approach of EP, which we shall call ‘structural motives’. The other was in terms of its aims and benefits, which we shall call ‘functional motives’

- **The structural motives**

A dominant reason in the respondents’ testimonials in their answers of question 5 of the questionnaire: ‘why did you engage in other EP experiences?’ was the fact that the methodology and process of doing EP was seen as flexible and applicable to the classroom and to their day-to-day teaching:

...the use of written expressions, homework, pair work, as instruments to collect data from my students made me change my mind about research, it is not that difficult; it only needs willingness and self -motivation, so I just wanted to take the advantage of the possibility to integrate research in my normal pedagogy and teaching which is a key characteristic of EP (**TB**)

At this stage, **TA** and **TD** related their motivation to engage in other teacher-research experiences to their tendency regarding teacher-research enquiry as being methodologically different from the conventional approaches to scientific research. These respondents claimed that before their engagement in the EP project, they only thought of research being academic and highly rigorous, thus it was perceived by them

as a difficult and painful process. These teachers formed their perception of research from their engagement with academic research at university:

Before I engage in this type of research which is EP, I have only been familiar with that type of research that we generally do at university; I saw research as being very statistical in nature and very analytical and time consuming ...
(TA)

TD had the same experience with academic research as **TA**, thus, they both shared the same opinion about it:

Before familiarizing me with EP, I was not aware of how to get data or how to use it for my professional development and I have never thought of research to be used for my professional development ...research for me was a painful and complex ... (TD)

The nature of doing EP which was flexible, integrated and teacher friendly caused these teachers to change their mind about research and thus motivate them do further teacher-research experiences:

My experiences with EP dramatically changed my mind about research; I can now think of research as being an enjoyable experience when it is not so demanding on the part of the practitioner. I have just incorporated it in my daily work and thus was not that difficult and did not sound unfamiliar for my students... So, I say that this feature of EP is what encouraged me to do other experiences and benefit from the simplicity and humbleness of the research work as opposed to other types of research (TA)

TD took a more pragmatic stance writing about why he engaged in further EP research as he considered the task of writing up results in academic research is a burden on the teachers' every day routine, consequently, not having to do this task in the EP research he has done was a force motivating him to involve in further research. He stated:

“Doing the research for the sake of understanding quality of life in my classrooms and not having to write a proposal or writing up results is what heartened me do further experience” (TD)

The respondents’ views included above suggest that when teacher-research is seen as a form of inquiry not necessarily bound by the constraints of conventional forms of research, it is most likely to motivate teachers involve in it. Nevertheless, this very same reason might threaten the reliability of our participants’ teacher-research. A question like: for it to count as ‘research’, can ‘teacher-research’ take place in non-academic ways? might come to the mind of readers. The teachers’ responses discussed above like: “My experiences with EP dramatically changed my mind about research” (TA) might well suggest that our teachers changed their conceptualizations of research after their engagement in EP. This might in other words denote that if teachers get to perceive research as not forcedly ‘objective’, large-scale hypothesis testing, in the ‘positivist’ tradition, then many teachers won’t wonder if research is something they can viably do.

- **The functional motives**

From this perspective, reasons provided by the respondents to why they further engaged in EP were discussed essentially in the light of its objectives and benefits for their professional development.

For TA and TD, the possibilities that EP presented to understand things from their students’ perspectives that might not have been available through other forms of professional development was a very motivating aspect for them to conduct further research:

...our current professional development does not focus on students’ data...
So I wanted to adventure in another EP experience because the first experience showed me that data can be one of my best friends to evaluate myself as a teacher and to know many things about my students (TD)

Actually, the first experience of EP ... showed me that students are capable of providing me with wide range of data about what they personally

experience in the classroom and even outside the classroom, so I was curious to learn about myself from them. The first experience like nurtured my curiosity to know more about what I am doing in the classroom from the opinions and reflections of my students (TA)

As TA and TD continued to answer why they engaged in other EP experiences, they drew attention to the importance of playing an active role in researching their own practice and how this helped them get relevant understandings of their local teaching contexts:

The fact of playing an active role in generating knowledge and understandings about my work is what encouraged me to do another research experience... (TD)

I decided to engage in other EP experiences because I understood that this type of research has a great potential to help me understand the real context where I teach and the real students who I teach... I realized how different it is when you get informed by a teacher or by a researcher about a classroom or about learners and when you try to get these information on your own , it cannot be the same truly it cannot...(TA)

Other motivating factors were identified by the teachers:

For TD, the autonomous and reflective nature of EP was clearly advocated by him as a motivating reason to why he chose to carry on doing EP. Talking about the autonomous nature of EP as an approach to professional development, he noted:

“The autonomous nature of the research was another promoter for me; I suppose that when the professional development activity that we engage in is intrinsically initiated, I get involved in it wholeheartedly”.

Referring to the reflective nature of EP, he added:

“...and also the reflective and analytic nature of this approach gave me control over my professional experiences and that the approach itself is motivated by puzzles and things that I find meaningful for me”.

As a different reason, **TA** stated that she engaged in other research experiences to challenge her abilities as a teacher-researcher when she had to do that independently and to see if she can consider herself a researcher:

... I engaged in other experience to challenge myself, to see whether I can be a researcher on my own implementing the knowledge that I have acquired in the EP workshop and I just thought that it is the right moment now to investigate my puzzles and get to understand them, otherwise I wouldn't be able to call myself a researcher (**TA**)

TA's statement might indicate that this participant was still hesitant to call herself a researcher after the completion of the EP pilot experience, thus she might have thought that she would first initiate personal EP experiences before she would see herself as a teachers-researcher. This reason might have excited her to do other EP initiatives and challenge her capability as a teacher researcher.

Why did TC stop doing EP?

As mentioned earlier in this section, not all teachers who participated in this study attempted to keep doing EP as an approach for their professional development, at least before the end of the educational year during which the EP project was being implemented. **TC** didn't engage in any other EP experience after the EP pilot. This teacher provided different reasons for why she didn't engage in further research including: having to do the research individually, lack of external support to conduct research and low self-motivation. These reasons are discussed as follows:

- **Having to do the research individually:**

TC noted that the first EP experience (EP pilot) was highly collaborative while this was not the case once the EP pilot was completed. She particularly indicated that she

was not motivated to engage in further research alone and that she was more likely to engage in research collaboratively with the help of colleagues. She commented:

...when I had to do other experiences alone, I lacked opportunities to discuss the research with a colleague. I think that maybe having someone else with whom to start a research project or experience helps to find a research focus and to help each other during the process of reflection and analysis. I felt I needed someone to help me start again... (TC)

TC's statement might suggest that conducting teacher-research projects as part of like-minded professional community is more likely to motivate them get engaged than working in isolation.

- **Lack of external support to conduct research**

Many studies have emphasized that external support from school stakeholders plays a crucial role in supporting teacher-research projects in the classroom, for instance: Borg 2006 highlights the importance of mentoring during research experiences advocating that the role of mentors in supporting teachers to conduct small-scale research is of vital importance.

TC felt vulnerable when she had to carry on doing research without the support any external source of backing, thus she was not motivated to engage in further research. She stated:

What also demotivated me from doing other experiences was the absence of support from a mentor or a more experienced teacher in teacher-research; during the first experience, it was motivating to receive feedback and scaffolding from the researcher to carry on the efforts (TC)

This participant might have expected that working in a school where 'teacher-research' is not part of its culture would provide no place for her to seek for help during a teacher-research endeavor. TC said below:

If I am teaching in a school where a culture of teacher-research doesn't exist at all, then I think that receiving support and evaluation from an external source becomes so important for a teacher to continue doing teacher research, otherwise, I think that I would find no source for help to turn to during my research (TC)

- **Low self-motivation**

Motivation to engage in research has been acknowledged by some researchers as key to doing and sustaining it (Dikilitas. K, 2016. Borg, 200). Dikilitas. K (2016) highlights that expecting teachers to develop their professionalism and understandings of their practice through active engagement in doing research may sometimes be impeded due to the motivational issues. This is congruent with the findings of our study as TC revealed that what mainly impeded her to continue doing EP was related to her lack of self-motivation. She clearly stated:

“maybe the main reason that retained me from doing other EP experiences ... is directly related to me; maybe I was not self-motivated enough to engage in other research...”

However, TC noted that she had low self-motivation to do EP after the first experience because of the fact that she was retiring very soon as she felt that she was unfortunately introduced to the approach of teacher-research a bit late in her career. She indicated that she was more likely to engage in EP if she had been introduced to it earlier. She commented:

...I am retiring this year from work, so this fact might have demotivated me; it is like feeling that my introduction to this approach has happened a bit late in my career, maybe if I have been introduced to it earlier, I would have done efforts to succeed other experiences (TC)

As shown in this section, three teachers in this study decided to do further EP experiences. Each of TA and TB engaged in two experiences after the first, while TD engaged in only one and TC decided not to do any further EP experiences. These results

of the longer commitment of the participants to EP might have been influenced by the extrinsic motivation that **TA** and **TB** received from the researcher as these participants are the researchers' colleagues, whereas **TC** and **TD** didn't receive the same external motivation after the first EP experience as they worked in another High School where the researcher couldn't be present but only kept contacting them through mobile calls and emails. The researchers' pushing of **TA** and **TB** might have helped them carry out other research. These respondents were dependent on the researcher's support more than the others who might have lacked extrinsic motivation. Yet, this doesn't necessarily indicate that the participants who were involved in other experiences after the first one completely lacked intrinsic motivation, since all of them were also motivated to do research on specific 'puzzles' relevant to their classroom practices.

The case of **TC** above might be suggestive that though teachers may be aware of how to do teacher research and of its potential benefits for their professional development, awareness alone, then, might not be a sufficient condition for teacher-research to occur and be sustained. Thus, motivation, support and collegiality are other conditions that may highly promote such research in our schools.

3.3. Summary and discussion of the findings collected from interviews and open-ended questionnaires

Throughout this study, focus was put on the case of four English language teachers at the Secondary level exploring their experiences with exploratory practice as an approach for their professional development. The study found that our participants did benefit from engaging in the EP project in their schools. EP as a professional development approach had positive impact on the teachers' professional learning. However, some constraints and challenges were present during their teacher-research engagement.

For the first research question (RQ1), it was found that EP as an approach to teacher-research benefited the teachers in the following ways: EP affected teachers' practice. It enhanced their awareness of their profession and their students' problems 'puzzles', needs and interests, thus, eventually helped them change their practice in a

way that met their learners' needs and led to a better quality of classroom life. Their engagement in EP also provided the teachers with a practical opportunity to examine their assumptions and beliefs so as to either correct them or prove them relying on empirical data from their learners. It was also found that engaging in EP satisfied teachers' preference of learning and growing professionally in a collegial atmosphere during the EP pilot, nevertheless the second phase of the EP project more or less witnessed a break up of collegial relation among our participants who decided to carry on investigating individual puzzles.

Moreover, EP provided an approach for teachers' professional development that was initiated and owned by the teachers themselves, accordingly, they played an active role during their professional learning instead of having others in authoritative positions to tell them how to do their learning. In relation to RQ1, the study also revealed that EP as an approach to professional development was highly contextualized as it allowed teachers to investigate issues which were immediately relevant to their local working contexts.

RQ2 aimed at investigating the challenges that our participants encountered during their engagement in EP. The findings show that teachers witnessed the following constraints:

- 1- Time constraint
- 2- Lack of research skills
- 3- Lack of school support and recognition
- 4- Classroom-based constraints

As a reaction to these constraints, our participants suggested some measures for effective teacher-research engagements at Secondary Schools. They highlighted the importance of protected time for doing teacher-research, training teachers on teacher-research methodology and supporting them to successfully involve in teacher-research projects. In this case, they found support and recognition from the school principal, colleagues as well as from trainers and teacher-research experts to be crucial to help them carry out and carry on doing research.

RQ3 deals with the longer commitment of our participants to doing EP. Here, findings show that out of the four teachers taking part in this study, three (**TA**, **TB** and **TD**) were involved in further EP experiences after the first one. They were motivated to do so as they believed EP was an effective tool for their professional development. The flexibility of EP as an approach to teacher-research as compared to traditional research was the key motive to their further engagement. The teacher who stopped doing EP after the first experience (**TC**) related this to lack of external support and low self-motivation to do research. The study hopes to provide a valuable example on how EP projects might be implemented at Algerian Secondary Schools for teachers' professional development, thus enrich existing research on teacher development in Algeria.

3.4. Implications of the findings of the study

In light of the participants' personal engagement in EP, the working conditions as well as the educational policy at the two Secondary Schools of our study, a number of implications might be listed resulting from this research. Our implications mainly concern Algerian EFL context: English teachers at different Secondary Schools, inspectors of English as well as Secondary School principals.

- 1.** EFL teachers at Secondary School levels might find the findings of this study a source for understanding the benefits teacher-research might have on their professional development as well as on their practice as whole, accordingly, they might think of conducting similar projects.
- 2.** One notable finding was that participants who did the EP project faced challenges during their teacher-research engagement. One of the evident constraints was their feeling of working in isolation as a consequence of school administration lack of support, hence, Secondary School principals and administration staff might be illuminated with the fact that their support and recognition is extremely important to enable teachers to conduct as well as to sustain teacher-research endeavors in their classrooms.
- 3.** The outcomes of this study provide considerable input for English Inspectors who are involved in providing PD trainings and seminars around the different districts of Algeria. As the study provides reassurance that practicing teacher-research is

of high value, these trainers might feel the need to include the issue of teacher-research in general and EP in particular in their seminars' agendas to firstly introduce it to all English teachers who work under their supervision, then secondly 'if possible' monitor and evaluate teacher-research programs.

4. It is worth emphasizing that our study by no means underestimates the value of district wide seminars for teachers' professional development and in-service training, yet, our findings might be of crucial evidence which might illuminate education authorities and leaders with the fact that reflective and analytical approaches for teachers' professional development such as teacher-research might well enhance the role that seminars and workshops play for teachers' development in practice, hence, including teacher-research as one of the professional duties of teachers might be one of the requirements of Algerian Education District Offices in a near future.

3.5. Limitations of the study

Although this research was carefully prepared, there were still some unavoidable limitations that may have affected our findings. Identifying the flaws of our study is useful for researchers who may conduct future research on EP in a sense that there are several areas of this study that could be improved based on the limitations which are listed in the following examples:

1. The rigidity of the educational system in our schools was one of the most difficult issues that we had to face during the implementation of EP; even though we received consent to implement EP from the Principals of the two Secondary Schools, yet, for the principals of these schools, doing teacher-research was not a high priority as other more pressing concerns such as completion of the educational programme, exams and assessments were likely to be higher up their agenda. Thus, the fear from staff that the new practice of EP may not work, or it may take teachers out of their comfort zones may have affected teachers' motivation and confidence in conducting research hence influencing the whole results of our study.

2. All the teachers of this study were not familiar with EP, they had never engaged in teacher-research experiences before this one. They almost knew nothing about this approach at the beginning of our study. Their lack of knowledge about EP may have affected the progress of the EP project. Consequently, the teachers relied only on our guidance during the EP project except for TA who was curious enough to read articles about this approach.
3. Efforts were made to deal with the limitations mentioned above. As creating a school environment and culture where teachers are encouraged to do research and feel more confident in conducting it was beyond our ability. We did our best to motivate the participant teachers through providing them with examples and case studies from other schools about the benefits and impact teacher research projects may have. Moreover, to handle teachers' lack of knowledge about EP, we deemed it was necessary to organize an EP workshop before getting the teachers involved in any EP experience. The main objective of the workshop was to familiarize our participants with the principles of EP as well as its procedures, but it also aimed to ensure that research was not being conceived of by the teachers in ways which make it appear to be an unfeasible and irrelevant activity.
4. Another limitation of this research study is its size; as it is a case study of only two Secondary Schools and based on data collected from only 4 teachers, it is not possible to generalize its findings to the whole Algerian context of Secondary School EFL teaching. That is, though the findings showed that EP was beneficial to the teachers' professional development, still this result might be restricted only to the teachers who participated in this study, therefore, it might be expected that our results might have been different if EP was implemented with more participants and at different Secondary Schools with different working conditions and backgrounds. It is also important to mention here that this limitation was primarily caused by the fact that our investigation dealt with a totally new issue in the Secondary Schools where the study was conducted. Thus we had first to set and implement EP with the participants in these schools first, and then research its effects on the teachers' professional development. This condition might have influenced the number of our informants as it was difficult for us to

manage a large group of teacher-research practitioners who had no primary knowledge about EP. Hence researching EP with a small group of teachers was more feasible for the achievement of our study.

3.6. Suggestions for further research

The limitations of this study, The EP “lived experiences” of the participants in our project and their suggestions for better EP experiences in the Algerian context, the analysis of the data, as well as the complexity of the issue of teacher-research in our context have all shaped recommendations for further research which might for example work on the following areas:

1. The first reasonable suggestion would be that research might for example investigate the possibility of implementing teacher-research at EFL Algerian classrooms and the perceptions of teachers towards this approach for their professional development at a larger context to provide us with an evidence-based basis from which teacher-research projects might be implemented in enhanced ways.
2. This study particularly investigates EP as an approach for teacher development; therefore, further studies which research EP as an approach of teacher-research as compared to other approaches of teacher-research such as action research would equally be useful.
3. As teachers in this study suggested the importance of training teachers on teacher-research methodologies, research into the type of teacher-research training that better accommodates our school cultures and also understanding the role of teacher trainers as critical friends and mentors for teachers who want to engage in teacher-research projects in their schools might be of paramount importance.
4. During the course of data analysis, it became evident that teachers’ experiences with EP also affected their students’ learning. As the ultimate goal of teachers’ professional development is improving students’ learning experiences, further research on exploring the relationship between teacher-research and improving students’ achievements might be warranted.

5. Finally, given this study was exploratory and limited in scope, it might be further replicated to involve more teachers to increase the validity and reliability of its findings. It is also important to do more research about encouraging and enhancing Algerian EFL teachers' professional growth through reflective practices and teacher-research projects at all levels of school not only at Secondary School level.

Conclusion

This chapter was devoted to the presentation and discussion of the findings of the present study. The analysis of the results obtained from the interviews and the open-ended questionnaires was structured in an attempt to answer our three research questions. Summary and discussion of the findings obtained from our data collection instruments were provided after discussing the results attained from both research instruments in details. Finally, limitations and implications were listed that might enhance the field of professional development of English teachers in Algeria through teacher-research projects. It also provided suggestions for further research in the field of professional development and teacher-research integration in pedagogy.

General Conclusion

This study is the result of a deep interest in the integration of teacher-research approaches to teachers' professional development. It tried to research the effectiveness of exploratory practice as a teacher-research approach to four teachers of English at two Secondary Schools in Bouira, Algeria.

Concerning the topic of our research, three research questions were raised:

- 1- What do teachers consider to be the benefits of EP for their professional development?
- 2- What constraints, if any, did teachers encounter in conducting their EP project?
Did teachers who participated in the EP pilot continue to employ it as a tool for their professional development?
- 3- What reasons do these teachers offer as to why they do or do not still do EP?

In an attempt to find answers to these research questions, a qualitative method research was used implementing two qualitative data collection instruments. The first instrument was a semi-structured interview which was conducted with the participants of this study right after the completion of the EP pilot which was considered the participants' first engagement in EP. The second instrument consisted of an open-ended questionnaire which was administered to the same participants after the end of the educational year in an attempt to check whether they continued using EP as an approach to their professional development. This data collection tool was also administered to provide us with reports of how the participants proceeded in their further engagement in EP among those who did other research experiences. The analysis of data relied on a thematic analysis method of all of responses to the interviews and the open-ended questions of the questionnaire.

The findings yielded by both research tools showed that incorporating exploratory practice as a form of teacher-research into teachers' every day practice can be beneficial for their professional development. Using the EP principles and framework helped participants change their practice as increased self-confidence, courage, systematized reflection, making decisions based on empirical data from learners rather than on intuition, respecting learners' idiosyncrasies became new features in their teaching practice during the implementation of the EP project. Teachers also perceived that EP

was an opportunity to examine and change their previously held assumptions in the light of the results they got from investigating their puzzles.

Participants in this study have also acknowledged their students as reflective and independent individuals in the classroom. They considered that this has improved their quality of classroom life as they have indicated that doing EP helped them focus on their learners' needs, preferences and interests.

This teacher-research initiative through the framework of EP helped increase teachers' awareness and understanding of their teaching, of themselves as teachers as well as of their learners. EP has adopted a transformative approach to teachers' professional development, one which doesn't depend on top-down transmission of new techniques and skills. Rather it changed the teachers' from being passive to becoming more active, reflective and analytical in terms of their professional learning. It was an approach to teachers' professional development initiated and owned by the teachers; it provided them with a sense of autonomy and relevance to their local teaching contexts. Findings also yielded that participants faced a number of constraints during their engagement in EP, these were mainly: lack of research skills, time constraints, lack of support from the school community and other constraints which were mainly classroom-based. In addition, data from the open-ended questionnaire revealed that not all participants decided to carry on doing EP, TC for instance, didn't engage in any further EP experience after the first experience. Doing EP alone, lack of school support as well as low-self motivation were the main reasons provided by this participant as for why she didn't do any other EP experiences.

Finally, we hope that our humble study would provide valuable illumination to the existing work on the topic. Our findings may serve as a starting point for other research initiatives as well as for discussions among education authorities to implement and support professional development approaches based on teacher-research.

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Appendices

Appendix 1

Preliminary Questionnaire about Teachers' perceptions of their current PD programmes

Date: 5TH January.2016

To: Secondary School English Teachers.

As someone currently involved in the teaching of English as a foreign language, an academic researcher and a Secondary School English teacher too who is preparing a research dissertation about **English Teachers' professional development through teacher research** would greatly appreciate a few minutes of your time to respond to this questionnaire.

The results of this study will show your opinion about the effectiveness of the currently Continuing Professional Development programmes in which you are being involved throughout your respective district.

You were randomly selected from a pool of currently employed Secondary School teachers. You will not be identified by name neither the name of your School will be. All information provided by you will be treated as strictly confidential.

The data provided by this questionnaire will not be used for any other purpose or released to other people but only used for the reason of writing the researcher's dissertation.

The questionnaire will only take 15 minutes to complete. Please return it once completed.

Your participation is very much appreciated and will allow us to focus on critical issues related to the Continuing Professional Development of English Teachers.

Note

- **PD**: stands for: Professional Development.

Section A :

1).What professional activities are you participating in? Please tick your answer:

- District-wide Seminars.
- School based workshops.
- Mentoring.
- Reflective practice.
- Teacher-initiated classroom investigation (action research)

2).How often do you participate in them during the school year? Please tick your answer in the following table:

Never	Rarely	Sometimes	Often	always

Section B:

Now please read each statement and tick in the column that most closely reflects your idea.

1=agree 2=strongly agree 3=disagree 4= strongly disagree

❖ **Your participation in in-service PD programmes:**

	Statements	SD 1	D 2	A 3	SA 4
3	I participate in PD programmes because it is a job obligation				
4	My participation in our PD programmes is active: the trainer gives teachers a chance to decide about the content of the programme.				

❖ **The content of your PD programmes and your teaching practice and context:**

	Statements	SD 1	D 2	A 3	SA 4
5	Our PD programmes have little impact on my teaching practice.				
6	Our PD programmes disregard my own particular teaching needs.				
7	Our PD programmes are not isolated from classroom realities.				

❖ **Your PD programmes and your learners:**

	Statement	SD 1	D 2	A 3	SA 4
8	Our PD programmes have immediate impact on my students' learning.				

❖ **Your PD programmes and transferring the professional development ideas to the classroom:**

	Statement	SD 1	D 2	A 3	SA 4
9	I cannot apply what I have learnt during PD programmes in my classrooms				

❖ **Your PD programmes and reflection on Teaching practice:**

	Statement	SD 1	D 2	A 3	SA 4
10	Our PD programmes allow me to reflect on my teaching experiences.				

❖ **A general opinion:**

	Statement	SD 1	D 2	A 3	SA 4
11	I believe that our PD programmes are insufficient for my PD.				

Appendix 2

Invitation Letter to Participate in a Research Study

I am a student at the University of Foreign Languages Of Bouzareah, (Algiers) English Department, enrolled for a Magister Degree in Didactics and Linguistics. I am conducting research for the purpose of my dissertation.

My research focuses on the potential of Exploratory Practice (EP) as an approach for teacher professional development. The EP study is going to take place in your respective schools during the second and third terms of this educational year (2015-2016). To accomplish my research, I am seeking the participation of a few colleagues who would

volunteer to cooperate through the study. The details of this study are briefly explained below:

The participant will be asked to attend an EP workshop/training that will be arranged according to their working schedule. The purpose of the workshop is to acquaint the teachers with Classroom Exploratory Practice: the researcher will explain the principles of EP and how the teachers could possibly conduct it in their own classrooms.

If you decide to participate, you will be interviewed after conducting your first EP experience. The interviews will take approximately 2 hours (or more) and if so you wish, the interviews will be recorded digitally. The complete transcript will be returned to you so that you can make any necessary amendments before I complete the analysis of all my data. We shall conduct these interviews at a time and location convenient to you. Moreover, you will also answer an open-ended questionnaire during the summer holidays to report any further engagement in EP after your first one.

You will be given anonymous names and identifiable information will never be used in a publication or presentation, all your responses will be confidential, no one except me and my thesis supervisor will have access to the information you will provide.

A non-monetary reward will be provided by the researcher for the participants by the end of the study as remuneration for time and efforts.

Participation in this research is completely voluntary and you may choose to withdraw from the research at any time or not answer questions that you do not feel comfortable answering.

If you are willing to participate in it you are requested to fill in the following details. Showing your consent through signing this letter means that you have understood and accepted the terms and details of the study as mentioned above.

Yours faithfully,

Miss, Imane Boukerrou

Magister Student

University of Bouzareah

Algiers

I agree to participate in this study “Exploratory Practice for Teacher Development” and understand and agree to the terms of my participation.

Full
name.....Date.....

Signed.....

Appendix 3

Semi-structured interview

- 1- What did you learn from the EP experience?
- 2- How did you benefit from the EP experience as an approach for your PD?
- 3- What constraints, if any, did you encounter during the EP experience?
- 4- What can you suggest for future EP experiences?

Appendix 4

The open-ended questionnaire

- 1- Did you do any other EP research?
- 2- If yes, what puzzles did you investigate?
- 3- Could you briefly describe the context of your research?
- 4- What procedures (method) did you use for the investigation?
- 5- What is your reflection on the research experience?
- 6- Why did you engage in other EP experiences? And if you didn't do any other experience, could you please explain why?
- 7- Do you think that EP improves your professional growth? Why? Why not?
- 8- What kind of in-service training do you find more beneficial? Why? (attending workshops, seminars, class observations by inspectors, reading available articles and books, teacher research)
- 9- What motivates/demotivates you during the EP research?

10- Would you like to conduct more EP research in the future? Why? Why not?

11- Please feel free to comment on EP if you need to do so

Appendix 5

The reading lesson used to conduct the first EP experience during the EP pilot

➤ **Before you read:**

- 1: Look at the picture below and try to guess what are the learners doing with their teacher?



An English Classroom from Rio de Janeiro

Source: Miller et al. (2015).

- 2: Skim through the following text and check your answer to task one above.
- 3: Have you ever been given opportunity to think about your learning experiences and share them with the class?
- 4: Are there things that happen during the English classes that you do not understand? If yes, site some examples.
- 5: Do you want to investigate these things in the class with the teacher just like these learners in Rio de Janeiro are doing? Why?

The text:

Exploratory Practice

For a long time, academic research about teachers and learners has been ‘third-party’ in nature. It has been done by someone acting as an outsider to the situation under investigation. The term (‘third party’) means that the outsider researcher is dealing with two other parties who are: teachers and learners. In this type of research teachers and learners are manipulated by the outsider researcher and treated as only consumers of research and not producers of it.

Consequently, academic researchers are regarded by people as experts on teaching and learning. On the other hand, teachers and learners do not receive an equal degree of recognition. Their views and opinions are often undervalued despite their in-depth knowledge of actual and real teaching and learning contexts and practices.

As a reaction to this situation, a group of English teachers in Rio de Janeiro (Brazil), with the help of Dr. Dick Allwright developed a new approach to classroom research over the last 15 years which is called: Exploratory Practice. Teachers and learners became the practitioners of classroom research.

Learners are regarded as co-researchers and partners with their teachers who systematically investigate areas in language teaching and learning which they wish to explore and understand better using routine classroom activities. They can now play an active role in expressing what they like or do not like as well as researching whatever is puzzling them about their learning experiences.

Allwright, Hanks. *The Developing Language Learner: an introduction to EP.* (2009).

➤ **While reading:**

• **Now scan the text and answer the following questions:**

- **1:** By whom academic research on teaching and learning was done in the past?
- **2:** How are teachers and learners treated in academic research?
- **3:** What is the effect of academic research on teachers and learners?
- **4:** How did English teachers respond to this in Rio de Janeiro?

• **Discuss the meanings of the following expressions with the teacher: (in relation with their context of the text)**

-Exploratory Practice
-Co-researchers

-Routine classroom activities
-Puzzles

➤ **After Reading:**

In order to get started with exploratory practice: think about whatever puzzles you during the English classes, your puzzles might be about a negative English learning experience as they can be about positive experiences too. After that, write a short essay (or even a paragraph) about Your puzzle.

The following notes can help you:

-These are examples of learners’ puzzles from Rio de Janeiro that can help you think about yours:

- I fail in English tests even though my ability in class is good
- I feel shy to ask questions in the class
- I feel bored in class
- All learners are interested in marks more than learning
- I Feel like learning more every time I attend English class

-Your puzzles are going to be turned into a ‘WHY’ question: e.g. why do I fail in English tests even though my ability in class is good?

-By asking the ‘Why’ question about the puzzle, this leads you to try to UNDERSTAND it.

-So in your essay express your personal understanding about what is puzzling you answering the WHY question.

Appendix 6

The reading lesson plan

Objective of the lesson: by the end of this lesson, learners will be able to discuss the concept of Exploratory Practice and write about what puzzles them during their English classes.

<i>Steps</i>	<i>Classroom activities</i>	<i>aims</i>	<i>timing</i>
Before Reading	<ul style="list-style-type: none"> • 1: Look at the picture below and guess what are the learners doing with their teacher? <p><i>Many answers are possible</i></p> <ul style="list-style-type: none"> • 2: Skim through the following text and check your answer to task one above. <p>The teacher and learners are doing classroom research (exploratory practice)</p> <ul style="list-style-type: none"> • Learners will feel free to answer and discuss questions 3-4-5 (many opinions are possible) <p>.....</p> <p>Scanning the text and answering the questions:</p>	<p>This stage aims at preparing learners to the content of the reading passage and stimulate their background knowledge about classroom research (if they already did it).</p> <p>The while reading stage aims at presenting the concept of exploratory practice to learners.</p>	15 mn

<p>While Reading</p>	<ul style="list-style-type: none">• 1. It has been done by someone acting as an outsider to the situation under investigation. (academic researchers)• 2. In academic research, teachers and learners are manipulated by the outsider researcher and treated as only consumers of research and not producers of it.• 3. The consequence of academic research on teachers and learners is that their views and opinions are often undervalued despite their in-depth knowledge of actual and real teaching and learning contexts and practices.• 4. Teachers in Rio de Janeiro responded to this to this by developing a new approach to classroom research which is called Exploratory Practice by which teachers and learners are the doers of the research. <p>Discussing the meanings of the expressions:</p> <p>Exploratory Practice: Exploratory Practice is the name given to an ongoing way of carrying out classroom investigations which provides language teachers (and potentially learners also) with a systematic framework within which to define the areas of language teaching and learning that they wish to explore, and understand better.</p> <p>Routine classroom activities: using familiar classroom activities such as in our case: written expressions, group discussions, project works, and homework...to do exploratory practice.</p> <p>Co-researchers: in exploratory practice, learners are regarded for the first time as active humans who can take their learning seriously, capable of researching their own learning experiences.</p> <p>Puzzles: situations that learners and teachers experience in the classroom and that they want to understand and find solutions to.</p>	<p>By answering the questions about the text, learners are supposed to understand the rationale behind this new research approach.</p> <p>This stage is the crucial part of the lesson: by writing the expressions asked from them, they will be doing their first EP experience.</p>	<p>20 mn</p>
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<p><i>After Reading</i></p>	<p>.....</p> <p>Learners will write expressions in which they identify something puzzling them about their learning and develop their understanding about it.</p> <p>-(If learners do not finish it in class, they will be asked to finish it at home and bring it the next time)</p> <p>-The expressions need to be written in a double sheet paper for they need to be gathered by the teacher for the next step of exploratory practice.</p>	<p>The research perspective is integrated with the teaching and learning through a use of a familiar activity that we are used to engage our learners in by the end of reading lessons (production phase).</p> <p>Learners can feel far more engaged with their learning since it is about their personal experiences instead of asking them to write about corruption, pollution or even malaria!</p> <p>This activity will not be done for the sake of research only, but learners will practice the target language too.</p>	<p>15 mn</p>
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Appendix 7

TC’s interview transcript

We could not provide the transcription of the entire interview because our interviews with the participants were long. For this reason, pieces of TC’s interview transcript were cut.

R: I would like to thank you again for participating in this EP project and congratulate you too for becoming a teacher researcher (laughter) so what can you say about the experience?

TC: I have to say that I am really pleased that my short time as a teacher-researcher has been so fruitful and that I am pleased with the insights I have gained

R: I am very pleased too. Would you now tell me about these insights and what you learnt from the experience please?

TC: the experience was so fresh and so enriching that I have learnt a great deal I think (...) and I think that the use of a written expression activity for data collection was the most fascinating thing for me; I want to say that I have never thought of the possibility of using the learning activities provided by the programme for other reasons, I mean teaching English (...) and I recognize now that collecting and using classroom data is an essential skill for any educators who want to be sure their students are grasping the content of the lesson, but are also doing more than that

R: sorry, excuse me, what can they be doing more than that?

TC: yes, I want to say here that (...) this short experience allowed me to stop for a while and reflect on other things that might be happening in the classroom while students are learning their English lessons and that these things are as important as English lessons too

R: and what are these things please?

TC: yes these are (...) I mean student's lives in the classroom and the quality of their learning experiences (...) I would like to say here that during seminars, we spend a lot of time, or I can say all our time discussing and considering pedagogy and what learners are supposed to learn by the end of lessons or by the end of a term and thanks to this teacher-research experience I suppose that we need to broaden our view of what constitutes or what forms [] because in fact our work doesn't consist of delivering lessons only, but also of understanding emotional, social and psychological aspects that effect teaching and learning practices in our classrooms and these aspects are hardly emphasized during our seminars, yes (...) I will come back to this idea, just let me now talk about my experience with data collection

R: yes please do

TC: thanks, so I was saying (...) our profession is unfortunately centered on data that is statistical, I mean on results from one test, from one or at the end of school year and our education culture dictates that this is the only data that can be useful but in fact (...) I think that as a teacher, I spend my entire time observing all sorts of immediate

information about students that inform but also influence how I teach (...) you know; these are things like “what students like and dislike during their learning?” “How do they [] what meaning and relevance do they attach to my teaching?” (...) yes questions like that but the problem is that these things cannot be informed through results of exams and tests, and EP was like an instrument to inform them and get them explored or, I can say it provided that qualitative instrument to research our practices that cannot be informed by statistical outcomes (...) and you know; numbers are important, but they can't provide educators everything, especially when we are looking for those real causes of our students' learning difficulties and sources of what puzzles them so in just one sentence; this EP experience just taught me how important and interesting it is to collect qualitative data from our students (...) it like connected me more to my students and their learning and also pushed me to practice reflection on my students' practice and having , yes as I said; having reflective dialogue with my students' data

R: yes thanks a lot; and what else have you learnt from the experience?

TC: I just want to say something else about data collection; the way we have used a reading lesson and written expression as well as classroom discussion as devices to the data collection process was the most motivating aspect which encouraged me to try how it does look when we use a normal activity to collect data (...) this is what triggered my attention most during the EP workshop and I was eager to see what all this was about in my classroom, I mean I was really doubtful about this story of the possibility to use classroom activities for research purposes even though I appreciated it

R: what about now? After having practiced it?

TC: thanks for the question; now, I do believe in it, I do really (...) it's very intelligent and maybe this is what is going to motivate me to engage in other EP experiences since it is integrated and there are chances for the research work to be applicable to our already existing curriculum of English (...) I mean the research try will not send us away from what it is already traced for us to do from the up, I mean from authorities (...) but actually I think that even the work of integration, or integrating the research in our daily teaching using routine activities (...) I mean this also needs efforts and struggle, because as you know, we don't have like the lesson plan we have prepared during the workshop in the course book, but anyway, it was much cooler and flexible than if we had to conduct questionnaires, interviews or other rigid instruments that experts use to do research with (...) but also, our students are not yet trained to do research like the one they are supposed later on at university

R: what do you mean by ‘the research they are supposed to do at university’?

TC: I am talking here about the issue of professionalism and expertise in doing research

R: Yes and what about the research you have done?

TC: doing EP was something different (...) as we used routine classroom activities for the work of investigation, neither me, nor my students needed to be trained on how to construct a questionnaire or an interview or other instruments, so this has shortened a long way for us to become practitioners of research, that was what I meant

R: yes thank you; can we now come to the idea of how EP helped you understand emotional, social and psychological aspects in your classroom? You told me that you would come back to this idea later on, so I just don't want to forget about it.

TC: ah yes, indeed. So (...) I just forgot what I was going to say about it! (laughter) so you know; the point is that there are some aspects (...) like [] but we also have to consider the emotional impact of what we do and the social environment where students do their learning (...) look I can give you the example of a student of mine who wrote about 'teacher's praise' actually this student was puzzled by my attitude of praise and showing admiration of his skills in the classroom

R: Sorry to interrupt but how did your attitude of praise and admiration puzzle him? What did he write?

TC: look; I used to praise this student for his intelligence and English skills in the classroom, because I thought he really deserves that, and he does yes, he deserves to be praised for his efforts (...) I thought that my praise would be encouraging for him and that it would [] I have been like brainwashed into thinking that it will build his self-esteem; I was all the time cheering him: "good job" "excellent" "you are amazing" "I like your examples" "you are great" "I cannot see the classroom without you" (...) but when I read what he wrote about this puzzle, I was like: "what! Praise is bad!"

R: can you remember how he expressed this puzzle?

TC: yes I do; he wrote that he doesn't need to be told when he has done a good job or when he had a good mark and that he becomes less interested in participating in the classroom because of my regular praise (...) he wrote that my praise makes him feel uncomfortable and that he finds himself in an embarrassing situation when all his mates look at him after being praised by me (...) listen, he wrote that because of my excessive praise, his mates nicknamed him 'oxford' and that they are calling him 'oxford' even outside school

R: 'oxford' really!

TC: yes, so these are the other things that happen in the classroom which need consideration too, not only teaching English, the example was just to illustrate what I mentioned before

R: thanks, I need example, please do provide an example whenever you can

TC: yes, and you see, it was not possible for me to know about that until I have done something more than delivering a lesson, giving instruction and other pedagogic responsibilities (...) believe me, after discovering this, I realize that this doesn't work for all students and in all contexts (...) it was so terrible to discover that

R: how was it terrible?

TC: yes; this experience with this student showed me that I was very much in the business of an ignorant (...) there was not a lot of room for this student to tell me about that, I didn't give him the space before because it was all [] perhaps I had been so seduced by being a teacher

R: yes, and what other things please?

TC: yes, there is also the significant issue of the difference that showing my students that I care about the quality of their life in the classroom, I mean, the inquiry helped me show my students that I care about them and like helped me [] I learnt that being aware of the quality of classroom life and inappropriate experiences in the classroom is the first step to developing a genuine awareness of my students' views about what is going on every day during the English classes

R: are you talking about awareness here?

TC: yes, I am; being aware of students' personal learning experiences and knowledge about students through classroom inquiry enabled me refine my class discussions, comments, illustrations, and ways I treat my students so that they are more effective learning experiences (...) here we can go back to the example I was talking about before; the student whom I used to praise a lot, you remember?

R: of course I do, so what?

TC: after the inquiry, I revised my behaviour with him, and I will not treat him the same way from now on, I will reduce my praise (...) at least I will make him feel comfortable

.....

R: so what would you suggest?

TC: let me just link this idea of time shortage with the pressure of completing the programme, because as you know, we are required to finish the official programme before the end of the year

TC: so what I want to say from all this is that we need more time to do research (...) and I suggest that [...] we have already mentioned this suggestion with the other

colleagues during the workshop; so why not to include time for doing research in the timetables of teachers so as to actively and clearly engage teachers in research adventures in their classrooms

R: yes, why not?

TC: but I think that it doesn't make any sense if I suggest to include teacher research in the timetables of teachers if teachers don't know anything about this approach and even if they know[...] still, we don't have enough knowledge about what it is

R: what do you mean by still?

TC: I mean that we, the teachers who attended the EP workshop and even though we had that chance to be introduced to this approach and read a bit about it, but still we don't really master it; I mean mastering the way of doing research so what about the other teachers? I mean those who haven't yet heard about it?

R: so what?

TC: we need to introduce it first to other teachers and to train us on how to do it properly and so on (...) it seems that we have to cross a long way before we could achieve all this and transform our schools into research based ones don't you think so?

R: yes a lot of work to do indeed

TC: starting from school authorities or education authorities first

R: how?

TC: I don't know (...) maybe by [...] I think we need leadership in this question [...]

.....

R: thanks a lot for completing this interview

TC: I would like to thank you too for this amazing experience, and I would also like to apologize for those days when you had to wait for me to complete the interviews

R: you are welcome; this work wouldn't have been achieved without your help

Teachers' further engagement in EP

Appendix 8:

TA's first EP experience in the further engagement

- **Puzzle 1: understanding L1 use in the classroom from the students' standpoint.**

Context of this EP experience: 2nd year foreign languages class.

Origin of puzzle	Method of investigation	Results
<p>This puzzle was developed out of her perception that the use of Arabic in her classrooms would diminish students' exposure to the target language. TA thought there should be minimum use of native language in the classroom especially with foreign languages streams where English is considered an important subject. But what puzzled this teacher was</p>	<p>She decided to use a 'write it right' activity' that students were supposed to do at the end of a grammar lesson of page: 140 at the 'Getting Through' textbook. In this lesson, students had to learn how to use unreal conditional using: "if+ past simple+ would" and "if + past perfect +would have" they had to learn how to use these types of unreal conditional to imagine the past and the future to be different.</p> <p>She asked her students to write a short school magazine article to tell what they think about their teachers' minimum use of Arabic in the classroom and describe how their learning of English could have happened differently if this situation had been different using the grammar forms that they have learnt in the lesson. By doing so, she thinks that she would have succeeded to reconcile the investigation</p>	<p>Thematically, most of the students expressed that if their teacher had used more Arabic in the classroom, their learning of English would have been better. They said if the teacher had permitted the use of more Arabic, they would have understood rapidly, they would have helped each other to understand, they would have felt less lost when they do not understand the target language and they would have asked many questions which they cannot ask in English.</p> <p>After reflecting on her students' data, TA came to the conclusion that perhaps not giving students enough opportunities to discuss the</p>

<p>that she was not sure if her students share the same mindset and what they think about her minimum use of Arabic in the classroom.</p>	<p>of the puzzle with the curriculum and thus make the work part of the teaching too. The activity was as follows:</p> <p>Write it Right: Write a short school magazine article speculating about how things would have been different if the teacher had used more Arabic in the classroom. Use the right form of conditional with correct use of tenses.</p>	<p>content of the lesson in their first language and to compare the target language to their first language might be an obstacle for them instead of a support; reading about her students' opinions, TA realized that they were facing difficulty with the target language and that they needed more use of Arabic. On one hand, investigating this puzzle has raised TA's consciousness that using Arabic in the classroom is not that bad and that it is worth trying to incorporate more of native language in the teaching of a foreign language as long as students might feel comfortable with this. On the other hand, she was still convinced that excessive use of L1 might prevent students from the amount of exposure to the target language</p>
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Appendix 9

TA's second experience in the further engagement

- **Puzzle 2: Why don't my students do their homework?**

Context of this EP experience: 3rd year scientific stream classroom.

<i>Origin of puzzle</i>	<i>Method of investigation</i>	<i>results</i>
<p>This puzzle developed out of TA's perception that this classroom was one of her best classes last year. Students used to have good marks and used to do all their assignments, including their home works, but she has noticed that they changed a lot this year and that they are showing resistance doing their homework. This situation triggered her puzzle for her next EP experience as she knew something wrong was going on with them. She wanted to research to get</p>	<p>As they were dealing with the final unit of the programme: "Feelings and Emotions". TA decided to integrate the research with the topic of the unit using a "Think, Pair, Share" activity which was familiar to them and which students had to do in page: 180 of the textbook: "New Prospects". In this activity, students were asked to write a short newspaper article describing their feelings about having to do home works. The activity was as follows:</p> <ul style="list-style-type: none"> ➤ Write a short school magazine article describing your feelings and emotions towards doing home works. Follow the procedure below: <ol style="list-style-type: none"> 1. Think about the topic and jot down ideas. Don't write full sentences at this stage. 2. Compare your network with that of 	<p>At home, TA worked on students' data and discovered that most of them felt overwhelmed by the amount of work which they have to do this year being in a 3rd year class and having an official exam waiting for them by the end of the year (Baccalaureate Exam) and that they were disorganized having no plans how to deal with this situation. This was the most common theme for students being unwilling to do their home works as expressed by them through the following statements:</p> <ul style="list-style-type: none"> • "This year we have hard work, I study for weekends and afternoons. I feel many thing I do by this hard work" • "I would prefer to spend my week ends revise my lessons because if I waste time in home works I find no time to prepare to my BAC. • "I feel disorganized I don't know what I should start with at home" • "I don't have a plan for revision because many revisions I should do them" • "We have many home works and presentations too. I feel lost because I cannot do all of them; if I do home works of mathematics, physics, science, I cannot do English one"

<p>the right understanding of the situation.</p>	<p>your partner. See if there are ideas that you can exchange with her/him. Then develop the ideas in your network into a short article.</p> <p>3. Review your article for mistakes. Then read it to your classmates.</p> <p>TA decided to use the previous activity so as to make the research implicit and in order for her learners to still practice the activities which they were supposed to do respecting the demands of the curriculum, while practicing EP in the same time. Although most of her students didn't finish writing their newspaper articles, TA could gather important data from the sentences that they jotted down during the first step of this activity.</p>	<p>TA decided to take this common theme into consideration and drop the other themes for further inquiry in the classroom. As a result of investigating her puzzle, TA understood that the problem with home works with some students was not home works on themselves or the type of home works. She finally realized that many of them were overwhelmed by the baccalaureate exam and that they fail to organize themselves and set their personal goals adequately. Thus, doing home works became an added pressure and stress to their preparation for the final exam; one of her student said: "All teachers give us home works, this add to my stress and fear of the BAC".</p> <p>These results made TA think of the importance for her students to start setting achievable goals for their learning even if it was a bit late, the final term was about to finish and they had only 4 weeks left, but still she thought of engaging them in a personal goal setting activity before it would be too late. Through this activity, she wanted to guide learners to be more motivated and organized in their preparation for the BAC as long as home works were still part of their programme and that they could not stop homework assignments just because of their preparation for the BAC.</p> <p>For the remaining 4 weeks, she asked them to set weekly goals for their learning and preparation for the BAC which could help them become</p>
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		<p>more organized and more relaxed with their preparations. She insisted on the students to make achievable and reasonable plans so as to help them become self-regulated students and also help them decide about what they should do for everyday and how to divide their revision and preparation on the remaining days before the final exam and thus reduce their feelings of being overwhelmed by the amount of revisions and preparation.</p> <p>TA checked her students' plans every day; some of her students were disinterested by the personal goal setting, but the majority of them took the activity seriously and reacted positively on it. Some of the students' goals during one week were:</p> <table border="1" data-bbox="1176 746 2072 1305"><tr><td data-bbox="1176 746 2072 794">Student 1: I will revise the activities we did in this unit</td></tr><tr><td data-bbox="1176 794 2072 906">Student 2: I will write expressions about feelings and emotions and memorize them.</td></tr><tr><td data-bbox="1176 906 2072 954">Student 3: I will revise If conditional and write sentences about all it</td></tr><tr><td data-bbox="1176 954 2072 1002">Student 4: I will not panic and revise some lessons of grammar this</td></tr><tr><td data-bbox="1176 1002 2072 1050">Student 5: I will not chat on face book tonight and do my exercises</td></tr><tr><td data-bbox="1176 1050 2072 1098">Student 6: I will finish my homework each night</td></tr><tr><td data-bbox="1176 1098 2072 1305">Student 7: I will revise the vocabulary related to this unit and meanings.</td></tr></table>	Student 1: I will revise the activities we did in this unit	Student 2: I will write expressions about feelings and emotions and memorize them.	Student 3: I will revise If conditional and write sentences about all it	Student 4: I will not panic and revise some lessons of grammar this	Student 5: I will not chat on face book tonight and do my exercises	Student 6: I will finish my homework each night	Student 7: I will revise the vocabulary related to this unit and meanings.
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Student 5: I will not chat on face book tonight and do my exercises									
Student 6: I will finish my homework each night									
Student 7: I will revise the vocabulary related to this unit and meanings.									

		<p>According to TA, this activity yielded good results. After three weeks of personal goal setting practice, she decided to ask the students who were still practicing the plan for both negative and positive feedback about how the plan is working with them. Some of the students revealed their feelings as follows:</p> <div data-bbox="1131 579 2033 1212" style="border: 1px solid black; padding: 10px;"><ul style="list-style-type: none">• I really need continuing do goals because the BAC is coming• I organize my revision much better• I stick my goals in the wall in my room and when I do them, I feel happy and not stressed so I stick others always and my mother love see them in my room.• I am sorry for I not start this when we starting this year, I missed a plan• When I write my goals on paper I feel to do my best to realize it and when I tick a goal because I did it I feel good</div> <p>She also reflected that during this time that they spent on the ‘Setting Personal Goals’ practice, their relationship improved and students</p>
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		<p>came to see her in the staff room even during the days when they hadn't English class to check them. She noticed that this practice made them more interested in learning and showed her that they were challenging themselves to achieve their goals.</p>
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Appendix 10:

TB's first EP experience in the further engagement

- **Puzzle 1: why do my students become disinterested by the end of lessons when I ask them to recapitulate what the lesson was about?**

Context of the EP experience: 3rd year foreign languages stream.

<i>Origin of puzzle</i>	<i>Method of investigation</i>	<i>results</i>
<p>TB observed for several times that her students are eager to leave the classroom a few moment before the bell rings. Once they finish the lesson, they immediately start packing up their staffs and talking to each other anticipating their leave. However, she</p>	<p>Starting the research, TB first told her students that they would be investigating the puzzle together in an attempt to ameliorate the quality of classroom life that they share by the end of the class and help each other benefit from the review activity that they needed to do at every lesson's ending.</p> <p>In the following step, she asked students to jot down some ideas about the</p>	<p>TB reviewed the answers at home and tried to analyze them to sort out the common answers that emerged from the study. The most common answer was that the type of the review activity "what have we learnt today?" was not interesting and that they got bored of the same activity every time.</p> <p>The review activities that students suggested were:</p> <p>Not all of the students answered this question, but most of them tried to express their opinions of what could work better as a closure activity for lessons and the common suggestions were:</p> <ul style="list-style-type: none"> • Most of the students suggested the use of different activities rather than the "what have you learnt today?" to close the lesson with

<p>tried her best to get them focus until the last minute before the bell rings. She believes that if she just let them work on a production activity and correct it till the end the class, this is like giving them a sudden and frustrating ending to the lesson. To avoid this, she used to do a kind of oral review activity so that they might see together if they have made any progress during the lesson. She simply used to take the last 10 minutes of every class to ask her students: “what have you learnt today?” She believes that by recapping and</p>	<p>following topics:</p> <ul style="list-style-type: none"> • What did not work with the review activity that your teacher uses by the end of classes? And why don't you participate in it? • What specific review activities can work better in class? <p>After that each student jotted down some personal answers, each pair compared their notes with each other and prepared a short dialogue from the answers which emerged from their notes by including the following topic: ‘ask your partner if he/she participates in the review activities, if the answer is no, ask why? Then ask what specific review activities can work better for him/her. Then, some pairs presented their dialogues to the whole classroom.</p> <p>In the same time, TB was writing the answers of students to each previous</p>	<ul style="list-style-type: none"> • 3 of them answered that they like activities that can be done through games and quizzes; they complained about the fact that the textbook lacks games and quizzes activities; they suggested closing lessons using more creative activities. • 5 of the students answered that they like drawing and learning through mind maps, they suggested exploiting mind map and poster activities to reflect on their learning of the lessons <p>The initial analysis of data collected showed that the main reason why students get disinterested during review activities was the type of the review activity itself. Most of her students suggested the use of different and motivating activities to close the lessons with. Consequently, the first thing TB did when she read again about her students’ answers was thinking of what activities could work better as review activity to meet their needs. She was very motivated to look for creative activities on the net and try to see how to implement them in the coming lessons. She decided to use the following activities:</p> <p>Name that word game: She used this game at the end of a vocabulary lesson. The lesson was about learning new vocabulary related to the last unit of the curriculum: ‘Feelings and Emotions’ page 169. Students had to look for meanings of words suggested in a table and then classify them into nouns and adjectives and to turn adjectives into verbs adding suffix ‘en’. After</p>
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<p>summarizing the most important things of the lesson, students can pick up something they missed earlier during the lesson. Unfortunately, this didn't seem to work for her classes, and the fact of her pupils' disinterest in this review activity is what puzzled her for so long.</p>	<p>question to see what was wrong with the review activity and why they get so disinterested. She also wrote the suggestions that some students could deliver. These data were kept for further reflections</p>	<p>covering the activities of the lesson, time came for the review activity to see whether her students understood the new vocabulary related to the new lesson. This time, she used a "name that word" activity instead of asking them what they have learnt from the vocabulary lesson. She selected vocabulary words that the students have studied during the lesson like: 'tragedy' 'humour' 'optimism' etc. Then, she divided the class into groups of five students and made every group decide about the word to describe to the other groups; the group tried to use a nonsense word to refer to the selected word and used it in a meaningful sentence. The first group that guessed the word won the point. Example: the first group selected the word "fun", they used the word: "bla" instead in sentences like: I like to go in picnics to have some bla with my family. I went to the theatre last week with my friends; we had a lot of bla there. The group that guessed that the word 'bla' referred to 'fun' won the point and they moved to other words.</p> <p>Gallery Walk: in a coming grammar lesson of page 175, students had to learn about the form we use in English to express likes, dislikes and preferences. The forms were: "I prefer to" 'it is better to' 'would rather' 'rather prefer'. After finishing the activities, TB used a Gallery Walk activity to see if students could use the forms they have learnt expressing their likes and dislikes about English. Thus she intended to use a creative activity as they suggested in their previous EP investigation. TB brought with her some</p>
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		<p>chart papers and some stickies for the activity. On chart of papers groups of students wrote sentences and draw emotions about their likes, dislikes and preferences about learning English using the forms we have learnt in the lesson and then their chart papers were attached to the classroom walls and other students walked around and attached stickies to correct each other mistakes and give advice. TB continued to use creative activities like these previous ones and avoided her previous practice of asking students about what they have learnt from lessons. She continued to look for more creative review activities and adjust them to her lessons' objectives.</p>
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Appendix 11

TB's second EP experience in the further engagement

- **Puzzle 2: why don't my students do their oral presentations by the end of every Unit?**

Context of the EP experience: same class (3rd year foreign languages stream).

<i>Origin of puzzle</i>	<i>Method of investigation</i>	<i>results</i>
<p>This puzzle developed out of TB's perception that many of her students are not interested in preparing</p>	<p>As part of her 'normal' classroom pedagogy, TB intentionally selected homework task for the investigation. She asked all students to write a paragraph</p>	<p>The most common theme which emerged from her analysis was: students don't know how to do presentations. The next them was about feeling uncomfortable to face the audience having to present in English. Another was related to "audience interest". 4 students found it very</p>

<p>their presentations and when they do prepare for a presentation, they do it quickly and at the last minutes without considering the linguistic and learning value of this activity. It appeared to her that students were not aware of the importance of oral presentations and she decided to use EP to understand her perception better.</p>	<p>explaining why they were so reluctant preparing for their oral presentations and how could they improve this situation. She insisted on the fact that she needed to read everyone's paragraph and gave them a whole weekend to complete the task.</p>	<p>discouraging when their classmates don't pay them any attention while they are presenting. The last theme to emerge from students' paragraphs was about "the topic of the presentation": 8 students found the themes of the presentations on which they had to work not interesting or difficult to tackle.</p> <p>Given the fact that students didn't suggest how to deal with this situation and given the richness of data, TB decided to write down the main themes of the analysis on the board in the next class and ask students to think about what could be done differently to increase their preparation of their oral presentations. The discussion was fruitful and very dynamic. TB made efforts not to interrupt them when they were using Arabic or when they were spontaneously proposing things that needed to be done for them. Together, they came up with different techniques to improve their preparation for oral presentations. They agreed on the following techniques which they started using as oral presentations improvement strategies:</p> <ul style="list-style-type: none"> • Giving courses in oral presentation: as most of students claimed not knowing how to do a presentation and as this was the major theme of the analysis and of the classroom discussion too, they decided to have a course on oral presentation. Students asked their teacher to prepare a class to explain the steps of preparing and delivering a presentation so as to add presentation skills to their syllabus.
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		<ul style="list-style-type: none">• Free selection of presentation topics: students considered that the topics of presentations imposed in the textbook do not always attract their interest and they are sometimes difficult to research and present. The class agreed that when topic selection autonomy is given to students, they are more likely to research about and present. As the present unit was about feelings and emotions; students decided that they would research and present any subject related to the unit.• Peer evaluation for audience interest: the students disliked when their peers didn't listen to their presentations. They agreed to get the audience engaged in a peer evaluation activity to get them listen to the presentations. Peer evaluation was one way they suggested to make peers listen more carefully to what their classmates are saying when the evaluations count; the evaluations are to be graded and constitute 3 percent of the students' final presentation grade. They hoped that this would make students take the assignment seriously and listen to each other presentations to benefit from them.
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Appendix 12

TD's EP experience in the further engagement

- **Puzzle: what are my students’ perceptions of cooperative learning?**

Context of the EP experience: students from two different classrooms; both of the classrooms were of 3rd year level one was a foreign languages class and the other was a scientific class.

<i>Origin of puzzle</i>	<i>Method of investigation</i>	<i>results</i>				
<p>TD has always been interested in the improvement of his students’ cooperative learning because he believes that it enhances and facilitates their learning of English. This teacher realized that despite of the fact that the new English curriculum and textbooks are expected to help students acquire learning strategies in small cooperative settings as opposed to the traditional listening to lectures technique, group work is not frequently utilized and supported. This situation made him think of the possibility of</p>	<p>TD decided to investigate with students from two classrooms because he wanted to gather as much data as possible from a wide range of students. Moreover, he wanted to implement the cooperative learning method with two English learning skills; “reading” and “writing”.</p> <p>He first started with the implementation of cooperative learning techniques, and then he interviewed some of the students to understand their ideas about cooperative and collaborative learning. The implementation of cooperative learning with both classrooms and skills was as follows:</p> <p>Implementation 1: <u>Reading Class with the 1st group (foreign languages stream)</u></p> <p>Technique applied: <u>Jig-saw Procedure</u></p> <p>The reading lesson that TD implemented the Jig-saw procedures with was “Education in Britain” pages: 82-</p>	<p>Having analyzed the responses from the students, TD was able to summarize the following patterns regarding his students’ perceptions of the advantages and disadvantages of cooperative learning techniques that were implemented in the two classrooms:</p> <p>Table 5</p> <table border="1"> <thead> <tr> <th>Advantages</th> <th>disadvantages</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> • Enjoying learning English together • Learning from peers • Developing cooperative learning skills • Developing good relationship with each other </td> <td> <ul style="list-style-type: none"> • being too dependent on peers • not taking the cooperative work seriously • non collaborative peers • collaborative learning is time </td> </tr> </tbody> </table>	Advantages	disadvantages	<ul style="list-style-type: none"> • Enjoying learning English together • Learning from peers • Developing cooperative learning skills • Developing good relationship with each other 	<ul style="list-style-type: none"> • being too dependent on peers • not taking the cooperative work seriously • non collaborative peers • collaborative learning is time
Advantages	disadvantages					
<ul style="list-style-type: none"> • Enjoying learning English together • Learning from peers • Developing cooperative learning skills • Developing good relationship with each other 	<ul style="list-style-type: none"> • being too dependent on peers • not taking the cooperative work seriously • non collaborative peers • collaborative learning is time 					

<p>implementing cooperative learning in his classrooms as frequently as possible believing that this method is highly important and fits with the demands of competency based approach.</p> <p>This situation stimulated him to try to understand the personal learning experiences of his students with the use of cooperative learning as a teaching method.</p>	<p>83 in “New Prospects” textbook.</p> <p>As indicated in the textbook, the reading lesson engaged students in only individual activities of pre and post reading. But to implement the cooperative learning technique; the teacher researcher decided to divide the classroom into three groups. One group was asked to read the first paragraph of the text, the second was asked to read the second paragraph and the third read the third paragraph.</p> <p>Later, they were asked to join up with each other. Each of them was asked to explain the paragraph they read to the other groups giving a summary. Finally, they answered the questions of Activity 1 and 2 of the book.</p> <p>Implementation 2: <u>Writing class with the second group(scientific stream)</u></p> <p>Technique applied: <u>Think, Pair, Share</u></p> <p>As indicated in page: 149 of the same textbook “New Prospects” the students were asked to write about suppositions of what would happen if a comet had collided with the earth? Students were asked to write a twenty line essay predicting the consequences of such</p>	<table border="1" data-bbox="1312 188 2029 587"> <tr> <td data-bbox="1312 188 1682 587"> <ul style="list-style-type: none"> • Stress reduction • Motivational effects • Improvements in grammatical and structural ability </td> <td data-bbox="1682 188 2029 587"> <p>consuming</p> </td> </tr> </table> <p>From the table of the patters above, it seemed clear to TD that the advantages of cooperative learning within the two skills; “reading and writing” outnumbered its disadvantages. Thus, after reading the students’ responses, his assumption about the importance of cooperative learning in an EFL classroom was confirmed.</p> <p>TD indicated that the research has been a rewarding experience for him; he was able to explore more about and understand cooperative learning directly from his students’ perspective and dig this subject much deeper so as to understand and disclose what his students feel when they are engaged in this kind of teaching method.</p>	<ul style="list-style-type: none"> • Stress reduction • Motivational effects • Improvements in grammatical and structural ability 	<p>consuming</p>
<ul style="list-style-type: none"> • Stress reduction • Motivational effects • Improvements in grammatical and structural ability 	<p>consuming</p>			

a collision.

Writing the first draft was done in class in pairs. In the next class; student A checked the errors in the draft and student B was responsible for editing the draft. Then together again, they wrote the final draft.

For the questions of the interviews, **TD** wanted to make them simple so as to facilitate his students' task of answering them.

Questions of the interviews:

- What are the advantages of the cooperative teaching technique that is implemented in the classroom?
- What are the disadvantages of the cooperative teaching technique that is implemented in the classroom?

Not all of the students volunteered to answer the interview questions; **7** students from the first group and **4** ones from the second group finally accepted to be interviewed. Students used some Arabic during the interviews. **TD** translated their sentences to English and corrected the mistakes they made during the transcription of the interviews.

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