

From Importer of Knowledge to Researcher of the Self: Exploring the Utility of Collaborative Action Research in Distance Second Language Professional Development

Farzad Mashhadi, Ph.D. Candidate, Department of English, Isfahan (Khorasegan) Branch,
Islamic Azad University, Isfahan, Iran
Farzadmashhadi65@gmail.com

Reza Biria*, Associate Professor, Department of English, Isfahan (Khorasegan) Branch, Islamic
Azad University, Isfahan, Iran
Rezabiria1398@gmail.com

Ahmadreza Lotfi, Associate Professor, Department of English, Isfahan (Khorasegan) Branch,
Islamic Azad University, Isfahan, Iran
Lotfi.ahmadreza@gmail.com

Abstract

Teacher professional development, as a burgeoning term, has attracted a surge of interest in English language teaching. In second language (L2) professional development, the common orthodoxy has been one which considers teachers as that of knowledge consumers. It is commonly argued that top-down approaches to teachers' professional development has done little to maximize teachers' professionalism. To unravel the above-mentioned dilemma, this study was an attempt to implement collaborative action research, as a viable means, to boost teachers' professional development in a networked community of shared knowledge. To this end, thirteen male and female Iranian English teachers, within the age range of 22-35, were selected through convenience sampling. The selected participants were added to a group in WhatsApp. The online classes began with plenary debate, mostly in the form of workshops through problematizing a particular topic, which were directly linked to teachers' actual teaching experience. Insights into the EFL teachers' professional development were acquired through the triangulation of data from four main sources (i.e., teachers' professional journals, reflective journals, action research projects, and semi-structured interviews). The findings revealed that engaging EFL teachers in a collaborative dialogue in a networked community of shared knowledge ultimately culminated in development of action research projects which resulted in sustained L2 professional development, whereby participating teachers developed a broader understanding of research and adopted reflective inquiry in their L2 teaching practices. The findings have important implications for language teachers in general, and EFL teachers, syllabus designers, and material developers, in particular.

Keywords: Collaborative Action Research, Professional Development, Reflective Inquiry, Community of Shared Knowledge, Action Research Projects

Introduction

It is generally agreed that teachers play a fundamental role in successful education and bringing about educational reform (Molle, 2013). Given this, teacher professional development has become a central issue in education literature (Wilson & Berne, 1999). Professional development of teachers might take into account a wide range of activities that are especially designed to boost the professional development of teachers who have already completed their academic training (Craft, 1996). It is argued that such teachers who participate in meaningful,

practical professional development programs are “better prepared to make the most effective curriculum and instructional decisions” (Vrasidas & Zembylas, 2004, p. 326).

In English language teaching, there has been an increasing interest in teacher professional development. Teacher education and teachers’ professional development are two equally burning issues for the professionalization of language teaching today (Yates, 2007). In L2 professional development, though, the common orthodoxy has been one which considers teachers as that of knowledge consumers (Borg, 2015). That is, common L2 professional development programs require teachers to attend one-off training workshops at which teachers are exposed with new information, ideas, and practices. Teachers are, hence, expected to take that new information back to their classrooms and implement it (Abednia, 2012). Such teacher training programs have no appreciation for teachers’ beliefs, tend to reduce teachers as mere consumers of knowledge, and make teachers come to underrate both their pedagogical knowledge and experience. It has become apparent that such top-down approaches to teacher professional development have done little to maximize teachers’ professionalism (Richards, 2008; Richards & Farrell, 2005).

Given the grave, genuine concerns mentioned above, recent theory, research, policy and practices in the realm of L2 teacher professional development have shown increasing demands for approaches that have greater potentials for transformative change in teaching and learning. In contrast to ‘training-transition model’ (Borg, 2015) of language teacher education which conceives of teachers as acquirers of knowledge from outside sources, there is an increasing consensus among scholars that collaborative action research (CAR) perceives teachers as knowledge generators and engages teachers in collective professional inquiry that ultimately generates new understandings from within (Burns, 2009; Levin & Rock, 2008; McDonough, 2006; Rainey, 2000). Given this, in the light of the innumerable challenges that confront L2 professional development and innumerable arguments that integration of CAR might have a positive impact on teachers’ professional development, the following research question was formulated:

Q. How does implementing critical collaborative action research in a networked community of shared knowledge affect the professional development of Iranian EFL teachers?

Literature Review

Collaborative Action Research (CAR)

Action research (AR), as a burgeoning term, has been implemented in many different settings, including schools, hospitals, health clinics, community agencies and government units. AR, though broadly being used, has an elusive quality and there is little agreement to an all-encompassing definition of AR in L2 research (Mackey & Gass, 2005).

AR can be defined as a “reflection in-action mindset for teaching” (Pelton, 2010, p. 5), where the prospective teachers continuously reflect on the impact of their actions. The two words themselves, action and research, form the building blocks of AR. In a similar vein, Wallace (1998) stated that AR is “basically a way of reflection on your teaching...by systematically collecting data on your everyday practice and analyzing it in order to come to some decisions about what your future practice should be” (p. 4).

AR involves teachers in a spiral of or a circle of movements between action and research (Nunan, 1989). This means that as an AR researcher embarks on taking an action, he simultaneously monitors and records what happens, which might give a new direction for future actions (Burns, 2010). In a nutshell, as Kemiss and McTaggart (1988) argues, four distinguished steps can be generally observed in conducting AR: planning, action, observation, and reflection. This cycle might recur until fruitful results would be amassed (Burns, 2009).

AR has attracted a good deal of interest recently (Crookes & Chandler, 2001; McDonough, 2006; Thorne & Qiang, 1996; Wang & Zhang 2013) since it can assist teachers to inculcate rich, vigorous perspectives about the intricacies of teaching and learning (McDonough, 2006). The changes do not happen haphazardly and are the fruition of precise information and systematic practice (Burns, 2009). AR assists teachers to bridge the gap between theory and practice by involving teachers to conduct research studies (Rainey, 2000). The main function of AR is to offer a solution in tricky situations in order to facilitate changes and refinements in practice (Burns, 2010).

AR is based on this popular belief that “local conditions vary widely and that solutions to many problems cannot be found in generalized truths that take no account of local conditions” (Ary, Jacobs, Sorensen, & Walker, 2014, p. 547). It is further argued that AR is a branch of systematic inquiry directed mainly toward teacher and learner development than it is to theory building (Mackey & Gass, 2005). Bell (1999) reflects on the practical, problem-solving nature of AR which makes this research paradigm appealing to many practitioners in the field.

CAR, as an emancipatory enterprise, is predominantly a social practice aims at improving practice, critically evaluating and deeply reflecting about teachers’ work. This transformation is promoted through rich dialogue and thick, meaningful collaboration between researchers and classroom teachers, aiming to develop a link between the micro-level of classroom practice and the macro-level of society at large (Locke, Alcorn, & O’Neill, 2013). Through collaboration, researchers which form a community of practice disentangle contextual issues from individual perspectives to enrich understanding (Dikilitas & Griffiths, 2017). Accordingly, Burns (1999) contends that “collaborative research offers opportunities for informal individual thinking to be transposed into more systematic and collective problem-solving” (p. 214). McNiff (2013) similarly underscored the centrality of collaboration and contends that “action research is an enquiry by the self into the self, undertaken in company with others acting as research participants and critical learning partners” (p. 21).

Distance L2 Professional Development

Over the past fifteen years, internet has evoked a huge shift in research on human behavior. With ever increasing numbers of people interacting continuously in online venues like chat rooms, web forums, emails, and instant messaging environments (e.g., WhatsApp, Telegram, and the like), researchers and teacher educators have become more interested in implementing computer-mediated communication in order to explore a particular phenomenon (Herring, 2004).

Currently, there has been a growing interest in the application of the internet to address challenges in L2 teaching and learning (Rienties, Brouwer, & Lygo-Baker, 2012). It goes without denial that the internet has huge potentials in facilitating and promoting learning and communication (Kabilan & Rajab, 2010). In connection, the place of the internet as a tool for providing educational experiences has become a widespread phenomenon in teacher professional development programs. Regarding the importance of teacher professional development on one hand, and the utility of the internet to effectively support professional development on the other hand, Walsh et al. (2011) underscore the vital role played by mobile technologies in providing ‘effective teacher professional development’ (p. 154) programs in developing countries.

CAR in L2 Teacher Education

Although AR has become a central issue in L2 education, there is still very flimsy evidence to substantiate the depth of actual AR practice in L2 teacher education (Burns, 2010). According to Burns (2009), the implementation of AR in L2 teacher education largely falls into

three distinct categories: “(a) required components in formal undergraduate or postgraduate courses, (b) collaborative teacher-researcher projects within educational organizations/programs; (c) individual projects by classroom teachers/ teacher educators” (p. 293). In the first category, teachers conduct a small-scale project as a requirement for their term papers (Brog, 2005). Integration of AR projects is based on a belief that “there is a need in teacher preparation programs for closer attention to enacting pedagogy, providing for future life-long learning” (Crookes & Chandler, 2001; as cited in Burns, 2009, p. 293) and “raising awareness of the relevance of research for teachers and enhancing research skills” (Jones, 2004; as cited in Burns, 2009, p. 293).

The second category is underpinned by a common observation that teachers should be involved in wide-scale institutional curriculum changes in order to maximize their professional development (Burns, 2009). These programs are usually financially supported by government and aim at boosting the collaboration among researchers and teachers/practitioners (Jones, 2004). The third category of AR is employed by individual teachers and teacher educators and is generally localized and unpublished (Mills, 2003).

Crookes and Chandler (2001) integrated the introduction of an AR research program into an L2 teaching course. To this end, 13 graduate students in a master program at the University of Hawaii were recruited. Reading materials and lectures revolving around the basic components of AR were amalgamated with the course syllabus, and the participants were required to conduct a collaborative research project concerning relevant L2 teaching themes. The data were collected through students’ journals, peer observation, questionnaires, interviews, and submitted oral and written reports. The participants’ perceptions about the course and their AR projects were elicited. It was found that the AR research project served beneficial purposes. Furthermore, students’ journals assisted teachers to communicate with their students more efficiently.

Wang and Zhang (2015) reported on the utility of a collaborative AR project conducted by a group of senior language teachers in order to boost teacher autonomy in a Chinese context in Beijing. The collaborative project consisted of 17 university researchers (Urs), 45 school teachers (STs) from 12 senior secondary schools. A variety of activities was incorporated, including plenary workshops through dialogic mediation on theory and practice of AR, URs’ group meetings for exploring emerging themes and issues and collaborative STs’ activities supported by Urs. It was revealed that through dialogic mediation, the STs made drastic progress, became more autonomous and played a more pivotal role in subsequent stages.

Dikilitas and Yayli (2018) explored teachers’ professional development through action research. The participants developed action research projects over four years and had an opportunity to investigate the development of their professional identities. The findings revealed four major themes in professional development: I) developing sensitivity to students, II) seeking better informed teaching practice, III) recognizing the need for self-development, and IV) increased inter-institutional collaboration which led to improved empathy among the participants.

Thorne and Qiang (1996) explored the incorporation of an action research project into a master’s program for English as foreign language (EFL) teachers in Beijing. The action research project was integrated along with the methods and teaching practice courses. Throughout the semester, the participants learned how to plan collaboratively, problematize, how to collect data, and how to carry out the projects. The researchers found that the participants who completed their action research projects displayed greater willingness to continue professional development.

Purpose of the Study

Despite the accumulating evidence that CAR plays a major role in facilitating professional development of language teachers, for Iranian EFL teachers who have been taught in traditional, teacher-led learning establishments, changing roles from that of importer of knowledge to that of seeking and generator of knowledge, can be difficult and frustrating experience. Moreover, while the overwhelming weight of emphasis has been on epistemological, methodological, ethical, and practical issues in L2 teacher education, the fundamental question of ‘how teachers change, refine and inform their practice, continue and legitimize their professional development’ is scantily given due attention.

Method

In order to address the above-mentioned research question, the triangulation of data from four main sources (i.e., action research project, teachers’ reflective journals, professional journal and semi-structured interview) was utilized. Finally, a grounded theory approach was implemented to yield an interpretive analysis of the data by extracting patterns, themes and categories from the data.

Participants and Research Context

In order to conduct this study, thirteen male and female Iranian EFL teachers were selected through convenience sampling. With regard to the number of participants, it is worth mentioning that generalizability is not the major goal of AR; rather, the chief goal is to understand what is happening in a specific context and provide a rich, detailed description of the context (Ary et. al., 2014). The participants were Teachers of English to Speakers of Other Languages (TESOL) and their age was within the range of 22-35 years old. The participants were selected from universities in Tehran, Kermanshah, Isfahan, Kerman, Abadan and Hamadan.

From the outset of the study, it was decided that: Firstly, the participants must have taught English for at least 3 years. Secondly, the study was entirely voluntary and the participants agreed to join eagerly. To this, the consent forms were completed by the participants in advance in order to ensure their voluntary contributions. Although 13 EFL teachers agreed, at the beginning, to fully participate in this study, six of whom refused to fully cooperate and, hence, were deleted from the final report. It was ensured that the data were not contaminated (i.e., those participants who had no long-term commitment were omitted) and the participants were encouraged to give their best effort. Given this, a group of seven male and female participants without any history of attending in any teacher professional program was drawn from a pool of Iranian EFL teachers. Of the final cohort of seven teachers, two were male and five were female. Their educational backgrounds were B.A. and M.A.

The different stages of this experiment were conducted in a distance language learning environment. To this end, WhatsApp was selected as a pedagogical and communicative tool to enhance interaction between the participants and the teacher educator. WhatsApp has recently cemented its place in Iran given the fact that it is one of the most popular social messaging applications. Furthermore, it is commonly recommended for its safe, reliable, and convenient possibilities available for cyber users.

A ‘Professional Development’ group was created in WhatsApp and the participants were added to the group. A rich range of materials were uploaded in the group. This included different materials, ranging from pedagogical videos to doc/PDF-format coursebooks. The selected materials consisted of a variety of instructional audio podcasts, videos of classroom practice, teacher books, teacher professional development materials, research textbooks, pedagogical techniques, and action research materials.

Data Collection Tools

Action Research Project

The participants were told to develop context-derived topics revolved around their L2 pedagogical practices (e.g., issues with regard to incorporating different techniques, implementing curricular innovations, teaching grammar, enhancing class participation, etc.). The participants had a good deal of opportunities to consult and receive peer and teacher feedback at all phases of research process. The participants were given clear guidelines to fulfill their action research requirements. The action research project sheet was adopted from Hong and Lawrence (2011) which, arguably, serves as a clear, sweeping framework for developing action research projects. The action research project sheet provides an overview of the information that the participants should assemble into the project (e.g., description of the context, examples of resources/review of literature, examples of student work, reflection on the process and practices). The framework provides a stepwise structure to develop action research projects and incorporates the following main stages: (1) Identify the problem, (2) Description of the context, (3) Research/Resources, (4) Evidence of student outcome, (5) Weekly reflections, (6) Data Collection. Each step takes into account rich, clear guidelines to illuminate research processes. The participants were instructed on how to conduct action research projects.

Reflective Journal

The participants were required to write a short account of their professional development at the end of the treatment. They were encouraged to carefully ponder over their professional journal entries or action research project and reflect on how they developed throughout the treatment sessions. This reflective essay ranged from two to four pages in length. The participants were informed that it was not mandatory to compose reflective essays in English.

To ensure that the submitted essays would not be either short or irrelevant which might seriously put the accuracy of data in jeopardy, a list of important questions were formulated to guide the participants. The participants were encouraged to write a comprehensive, clearly-planned essay and also address the questions in their essays. Nevertheless, some reflective essays were fraught with permissiveness. To come up with more authentic and accurate data, those reflective essays which failed to meet the expectations were immediately returned for further revisions.

Professional Journal

The participants of this study were required to record their thoughts and reflections about collaborative online AR classes, AR projects, the courses, and their L2 professional development. They were asked to write an entry with the average length of 100 words each week. The participants were not obliged to compose professional journals in English. They were advocated to provide a detailed description either in English or in Farsi. Each participant composed from 5 to 7 entries in the professional journal.

Initially, the participants were freely allowed to go through online classes, share their thoughts and perceptions about the context, the materials, and their L2 professional development. However, the returned entries were found to be either short or partially irrelevant to what the researcher aimed to inquire about. In order to guide the participants to be clearly informative about different aspects of the study and minimize either redundancy or inconsistency of the data, the participants were told to record their thoughts and feeling about pre-defined issues. To do so, a taxonomy of important issues with regard to online professional development classes was provided and was emailed to the participants. Then, the participants were required to write their

entries based on the pre-defined issues. To help participants fully appreciate the points, each pre-defined issue was supplied with clear-cut explanation to avoid any misunderstandings in writing the entries. The issues revolved around a rich, diverse range of topics, from the courses and interactions among the participants to novelty and practicality of instructions. The entries were carefully scrutinized and were returned if failed to meet the expectations.

Semi-Structured Interview

The participants' perceptions about collaborative online AR classes, the courses, the community of shared knowledge, and their professional development were inquired formally through semi-structured interviews before and after the treatments. In this study, all teachers were interviewed using an interview schedule. The interview was conducted in English. However, some teachers shifted to Persian during the interview. It was a semi-structured, open-ended format that lasted about 15 minutes. It is important to note that immediately after conducting the interview, the very first impression of the interview was jotted down in a reflection log by the researcher.

Data Collection

In order to conduct this study, thirteen male and female EFL teachers, aged 22-35, were selected through convenience sampling from different universities and institutions in Iran. In order to sample a geographically diverse range of participants, the internet advertisement was the main informing tool. After careful analysis of the demographic forms, those eligible participants who could fulfill the requirements of the study were selected. Moreover, those inattentive participants who did not fully cooperate throughout the study were omitted from the final cohort. Therefore, the data were collected from seven male and female participants. Next, the selected participants were added to a teacher professional development group in WhatsApp.

Next, the teacher educator, in advance, through negotiation with experts in the field, painstakingly selected the necessary materials which served as the teacher training courses to be taught to the EFL teachers in online classes. The selected materials consisted of a variety of instructional audio podcasts, videos of classroom practice, teacher books, teacher professional development materials, research textbooks, pedagogical techniques, and action research materials. The EFL teachers were exposed to the above-mentioned materials on their mobile phones via WhatsApp during a five month teacher-training project.

The online classes began with plenary debate, mostly in the form of workshops through problematizing a particular topic which was directly linked to teachers' actual teaching experience (i.e., what problems do you usually have in your listening classes?). The online classes were held two times a week for a total of roughly two hours per week. The participants were encouraged to share their opinions, engaged in a collaborative, critical debate by means of which different aspects of a particular topic were touched upon in every online session. Then, the researcher posted useful materials (e.g., usually short videos of classroom practice by experts in the field) concerning the issue just problematized. This was followed by further plenary debates and exchanging feedbacks. The participants were encouraged to make action plans and implemented their plans in their classes to address a problem. They were taught to go through circles of AR starting with identifying a problem, reflection and investigation, making action plans, implementation of action plans, analysis and reflection.

After the treatments, the participants composed a reflective essay and elaborated their professional development throughout the treatment sessions. In order to clarify the participants' perceptions about collaborative online AR classes and their L2 professional development, a semi-

structured interview was also conducted. Finally, AR projects were emailed to the teacher educator after the online classes.

Data Analysis and Results

In this section, the data from four different sources (i.e., reflective essays, action research project, professional journals, and semi-structured interviews) were analyzed. During the online professional development classes, the researcher made some field notes to consolidate the findings along with the EFL teachers' valuable comments. This allows for constant comparison given the fact that grounded theory relies on a simultaneous method of data collection and analysis.

Grounded Theory was employed in this phase of the study since the ontology of Grounded Theory was in accordance with the theoretical assumption of the study. As Charmaz and Belgrave (2012) argued, in order to complete process of data analysis in Grounded Theory, data must be “systematically organized, continually scrutinized, accurately described, theorized, interpreted, discussed and presented” (p. 95). It is worth mentioning that the four stages of open coding, axial coding, selective coding and developing exploratory model are not linear and work as spiral, overlapping phenomenon.

In this study, the accumulated data from the above-mentioned sources were coded and then inductively analyzed for themes. To this end, MAXQDA analysis software was utilized. After each source was analyzed inductively, a cross-source comparison was conducted to analyze, compare, and further interpret the themes and patterns that emerged. By implementing a multiple source study design, the generalizability and the validity of the findings were enhanced. The researcher read the texts and the data were coded and sub-coded. Having read the entire corpus, the inductive approach was implemented through which the themes started to emerge from the data. The coding procedures were as follows:

Stage One: Open Coding

This stage involved allocating each paragraph of raw textual data (from reflective essays, field notes, professional journals, and semi-structured interviews) a label or concept category that eventually helped to extract and generate themes. Open coding was carried out to capture different aspects of professional development of Iranian EFL teachers in a networked community of shared practice. In this stage, twelve different codes were developed, e.g. *refined practice*, *reflective scrutiny*, *higher involvement*, *systematic reflection*, *improved research skills*, *change (in L2 practice)*, *higher-level of motivation*, *sound understanding of research*, *demystifying research*, *meaningful collaboration*, *personal and professional upheaval*, *develop sense of awareness*, *liberal*, *incentives to grow professionally*, *reform*, *improved understanding*, *socially-constructed*, *challenging status quo*, etc. Some of these codes were later omitted, revised, modified, or added at the second stage. Only “major themes” survived.

Table 1. Stage One: Open Coding

Open Coding	Raw Textual Data from the Data
-------------	--------------------------------

demystifying research	Initially, I felt helpless in conducting research of any kind. I was under the delusion that research must be done by university professors. As a teacher, now I have reached to this point that research doesn't necessarily need many puzzling requirements. (Teacher C, reflective essay)
meaningful collaboration	I used to resolve my classroom challenges alone, I felt I could do all alone. Through online classes, we shared a great wealth of ideas.

Stage Two: Axial Coding

The next stage entailed the analysis of potential interfaces and linkages between some of the emerging themes. Through constant comparison across different data, emergent themes were continuously mined. The main goal was incorporating, classifying, and designating sub themes into larger thematic categories. Through thematic connections, four major emergent categories were identified: *Perception about research, transformative pedagogy, reflective inquiry, and empowerment*.

It is worth mentioning that this process was fluid in nature and was continuous synthesis of conscious and unconscious perspectives, developing theoretical knowledge concerning the topics under scrutiny, speculation, and cross referencing between the different sources (i.e., reflective essays, field notes, professional journal, and semi-structured interviews).

Stage Three: Selective Coding

This stage entailed achieving higher level of abstraction and developing a theoretical model. According to Haig (1995), constant comparison and spiral relationship with theory can lead to higher level of abstraction through which a systematic review of the data is carried out to develop a specific category. This stage entails the consolidation of the four significant themes into an overarching framework.

It is worth mentioning that this framework emerged from the interfaces between 'the emergent grounded data categories' and 'probation of the contemporary literature' for each of the themes. Given this, this stage required a more meticulous categorizing and precise specification of the major concepts. The major goal of the researcher at this stage was to attest that the grounded experience of the informants which was appropriately obtained by an illuminating theoretical perspective.

Synthesizing Themes to Develop a Grounded Theory

Analysis of the data accumulated from four different data collection tools (i.e., gathered from reflective essays, field notes, professional journals, and semi-structured interviews) revealed that implementing critical collaborative action research in a networked community of shared practice had a lasting impact on professional development of Iranian EFL teachers. The findings revealed that critical collaborative action research in a networked community of shared knowledge might develop EFL teachers' professional development in four main areas, two of which are targeted in this study:

- Perception about research
- Reflective inquiry

Perception about Research

As was described earlier, the data for this part consisted of the EFL teachers' reflective essays, professional journals, action research projects and semi-structured interviews. Through inductive approach and coding/sub-coding the themes, the initial themes were identified. The initial themes were as follows: *feeling about research*, *knowledge of research*, *demystifying research*, *extending research projects*, *sound understanding of research*, and *humanization of research*. After identifying the initial themes, the researcher grouped the related themes. As an example, *demystifying research* and *humanization of research* were merged into *feeling about research*. Furthermore, *sound understanding of research* and *knowledge of research* were further refined and were combined into a single new theme *ability to conduct research*. Finally, the initial theme *extending research projects* was renamed *motivation to continue research*. It is important to note that the entire coded corpus was read again and again in order to verify the identification of themes and supporting segments. This cyclical mechanism to data analysis and verification resulted in the identification of three segments: Feeling about research, ability to conduct research, and motivation to continue research. The segments are described in the following sections:

I) Feeling About Research

Initially, most of the participants were apathetic to research, claiming that conducting research activities should be done by experts who have specialized training in conducting research. Even worse, some of the participants argued that being able to conduct research is much far from their everyday teaching concerns:

To me research is something very scientific, scholarly. I feel, in order to do research, one needs some rigorous trainings. (Teacher E, reflective essay)

Some EFL teacher held a quite narrow conception of research and perceived research as “unproductive”, “unrewarding” activity:

At first, I felt conducting research was much waste of time. Why would I bother myself to learn to do research when I can learn some more practical stuff? (Teacher C, professional journal)

Nevertheless, by the end of online professional development classes, the participants gained a broader perspective and found that there were numerous approaches to research which not all of which require rigorous, systematic manipulation of variables or testing hypotheses.

In sharp contrast to what we had learned in postgraduate courses, I conceived research as a stepwise inquiry, replete with many complexities. We were frequently told about many strenuous, complicated specifications which I felt, in retrospective, quite demanding. (Teacher F, interview)

I got immense satisfaction from doing action research project. Through collaboration with other colleagues, we explored common issues and worked for a common cause. (Teacher D, professional journal)

Although EFL teachers' perception became more positive about research, some still prioritized “teaching well” to research.

I believe, doing research is not my main responsibility. Teaching well is more important. (Teacher E, professional journal)

Teacher E, however, rectified her statement and pointed out that conducting action research project contributed to her professional development.

I know effective teaching does not happen in a vacuum, many factors are involved. Among which, conducting action research project was useful for addressing my small-scale, main classroom challenges.

II) Ability to Conduct Research

In term of ability to conduct research, the participants began the online professional development classes with reportedly poor abilities to conduct research. However, by the end of the course, they felt more confident to overcome technical requirements of conducting a research. I felt doing research was tricky and challenging. As a postgraduate student, it put a great pressure on me. However, now, in spite of poor research experience, I believe, it is more convenient. (Teacher G, professional journal)

For most of the participants, the nature of action research seemed so complicated. However, some teachers found it relatively more manageable only when they began the research. Firstly, I found it difficult to grasp the ideas of AR, but it became clear when I started doing it. It is in the doing that it starts to make sense. (Teacher D, reflective essay)
I found it much easier when I did it. (Teacher A, interview)

III) Motivation to Continue Research

Most of the participants stated that they would continue to implement action research as a means to not only continue their professional development, but also to address common obstacles within the context of classroom.

At the beginning, I was not quite sure how I was going to conduct a study. The action research project, however, gave me an opportunity to go out of my comfort zone. I felt both excited and nervous. Then, it dawned on me that I could undertake a study as a part of my practical project for my M.A thesis. (Teacher A, professional journal)

Teacher C believed that action research provided golden opportunities to foster professional development:

Completing action research project through collaborative practice gave me the courage to flourish from novice to professional.

Teacher F stated that she might continue to work on her action research project to explore a host of ideas in order to bring about changes and reforms:

Through action research, I now feel more in control of what happens during a listening test. However, this does not mean that I have solved all my problems. I don't think my quest ends here. I believe my action research project is open to further enquiry and reflection.

Reflective Inquiry

The second theme which emerged in this study was reflective inquiry. The coding procedure which entailed open, axial, and selective coding was undertaken. Through inductive approach, the following initial themes were identified: *systematic reflection*, *reflective scrutiny*, *thick reflection*, *reflective conversation*, *critical reflection*, *reflection-in-action*, *reflection-on-action*. After identifying the initial themes, some themes were either discarded or combined into a single theme. After constant comparison, the following sub-themes were selected: Systematic reflection, reflective scrutiny, and critical reflection.

I) Systematic Reflection

The EFL teachers pointed out that they started online classes with a fairly shallow reflective orientation. They, however, learned to systematically reflect on practice and the research stages.

Initially, I was not able to systematically reflect on my practice. Gradually, I learned to base my teaching practice on deep, systematic reflection to not only learn more about puzzling classroom issues, but also grow as a thinking professional. (Teacher E, professional journal).

Teacher B believes that through thick, systematic reflection, which serves as a necessary ingredient of any action research project, she can explore a range of classroom puzzles or dilemmas:

To me reflection is everything. It gives me a wide range of possibilities for research in teaching and practice.

Teachers' reflections were found to be either reflection-in-action or reflection-on-action. That is, the participants reflected not only after the event, but also in the midst of action.

I usually reflect on moment-by-moment activities and this gives me insights to restructure classroom activities to lead to better outcomes. (Teacher D, interview)

II) Reflective Scrutiny

EFL teachers reported that action research through collaborative practice enabled them to inculcate a sense of reflective scrutiny to explore a wide range of issues with regard to their classroom practices, students' achievement, and their professional development.

When you successfully complete an action research project, you become motivated, you develop an ability to inquire about everything which happens in your classes. (Teacher D, reflective essay)

Reflective scrutiny enabled some EFL teachers to identify what might go wrong in classes and gave them an opportunity to promote their professional identity:

Through action research and deep reflection, I learned to think about my problems and weaknesses and stop sweeping them under the rug. This made me motivated to continue my quest for effective teaching practice. (Teacher A, interview)

Engagement in deep reflective inquiry appeared to provide an opportunity for EFL teachers to act upon ongoing challenges and deal with long-standing issues in their teaching:

When I engage myself in deep reflection and try to enquire about everything in my classes, my ideas about teaching also change. (Teacher B, interview)

III) Critical Reflection

EFL teachers testified that through completing action research projects, they learned to think, rethink, reason, and make meaning of an experience. Critical reflection happens when enough data is accumulated and entails "continual evaluation of beliefs, assumptions, and hypotheses against existing data and against other plausible interpretations of the data" (King & Kitchener, 1994).

I learned to engage myself in a reflective conversation, tried to reflect on the decisions I made, did my best to think aloud about what needed to be done in my classes and question my teaching routine, my assumptions, or my values. (Teacher F, interview)

The participating teachers stated that critical reflection empowered them to move from a 'deficit view of the students' to a 'deficit view of the learning':

I no longer believe my students are the problem. I know there are problems in my teaching set-up. I have learned how to identify the problems through deep reflection and conversation with my colleagues, test my assumption for further enquiry, and try to amend them. (Teacher D, professional journal)

Discussion

The findings of this study testified that EFL teachers who completed AR projects in a networked community of shared knowledge experienced a lasting effect on their professional development. Firstly, the findings of this study demonstrated that EFL teachers who carried out

action research projects as a part of distance professional development program developed an enriched understanding of research and felt motivated to continue to implement action research in their classes. This finding is consistent with those of McDonough (2006) and Thorne and Qiang (1996) who found that teachers who completed their action research projects expressed greater willingness to implement action research as a means to enhance their professional development.

Furthermore, completing action research projects through collaborative practice in a community of shared practice deepened the participants' reflective inquiry. Through reflection on concerning themes, the participants learned to refine their practice. This provided the necessary impetus for change from self-reflective problematizer to critical inquirer. This transformation was promoted through dialogue and collaboration between researchers and classroom teachers, manifested itself in development of a link between the micro-level of classroom practice and that of the macro-level of society at large (Locke, Alcorn, & O'Neill, 2013). This is in line with what Allwright (2003) and Wang and Zhang (2013) observed.

In this connection, it can be argued that in this online 'community of shared practice', there were ample opportunities for teacher-researchers to build knowledge collectively over time and develop their existing understanding. This happened through thick reflection and dialectic interaction. The present finding seem to be consistent with earlier findings (Burns, 2005; Lave & Wenger, 1991). Given this, "change and development are perceived as natural occurrences rather than constructed" (McIntosh, 2010, p. 38).

The findings of the current study also revealed that incorporating action research projects in teacher professional development programs was instrumental in promoting systematic reflection and critical reflection among the participating teachers. This finding is consistent with those of other studies (e.g., Burns, 1999; Kemmis & McTaggart, 1988; McDonough, 2006; Wang & Zhang, 2013). It goes without denial that the use of reflection as a tool to hone and refine practice is becoming extremely vital across education. It can be claimed that the essence of developing action research project through collaborative practice is sharpening teachers' way of looking, examining, and exploring what exists below the surface. Without systematic reflection and reflective enquiry, teaching is reduced to evidence-based practice whereby teachers are mere consumer of pre-defined practice advocated by instrumentalist (McIntosh, 2010). Through developing evidence-based practice to practice-based evidence, and by establishing the concept that all teachers can be researchers of their own practice through collaborative action research, teachers started to critique their practice through systematic reflection, which resulted in sustained L2 professional development.

Conclusion

Dewey (1929) argued that the study of teachers' own practice is 'a profoundly important form of educational scholarship' (p. 21). Given this, collaborative action research could serve as a viable tool to enable language teachers to reflect on their practice and creates a bridge to initiate self-directed professional development.

This study, not only echoed the first view of action research which involved EFL teachers working on a small-scale interventionist level to improve their own practice (i.e., self-directed professional development), but also pursued change not just in the immediate environment (i.e., classes), but in the wider community. The latter perceived "action research as a spiraling process of reflection and enquiry with the potential to become emancipatory and empowering" (Burns, 1999, p. 27). In essence, as McIntosh (2010) rightfully put, it can be argued that:

Action research is grounded in an eclectic mixture of philosophical thinking around transcendence, of ethical thinking around values, and of recognition that it operates in a domain of uncertainty as to how it apprehends the nature of an action. (p. 37)

The findings have important implications for language teachers in general, and EFL teachers, syllabus designers, and material developers, in particular. Implementing collaborative AR in a networked community of shared practice can enhance participants' reflective scrutiny to explore a wide range of issues with regard to classroom practices and students' achievement. Moreover, collaborative AR might deepen understanding about research while learning to do a research. This might provide teacher educators, syllabus designers, and materials developers with opportunities to gain fruitful insights into implementing and incorporating action research courses into teacher education programs.

Taken together, the results suggest that action research should be incorporated in teacher education programs, either as an independent course or as a component of an existing course. However, it is important to bear in mind that action research projects should emerge from the interests and concerns of the teachers and not solely from the university's compulsory agenda. Syllabus designers and material developers are, therefore, recommended to integrate action research in existing coursebooks and syllabi in order to compensate for the shortcomings of the teacher education materials which mostly lack meaningful, practical trainings.

The education system and teacher training colleges should establish a workable, fair system of rewards for language teachers to be credited for their effort to continue professional development through conducting action research projects. That is, if engaging EFL teachers in collaborative action research in a community of shared knowledge is to yield beneficial results, adequate time must be given for training EFL teachers and undertaking action research projects. This boosts ownership and accountability of participating teachers' when they identify the practical benefits of conducting research.

References

- Abednia, A. (2012). Teachers' professional identity: Contribution of a critical EFL teacher education course in Iran. *Teaching and Teacher Education*, 28(5), 706-717.
- Allwright, D. (2003). Exploratory practice: Rethinking practitioner research in language teaching. *Language Teaching Research*, 7, 113-141.
- Ary, D., Jacobs, L., Sorensen, C., & Walker, D. (2014). *Introduction to research in education*. Wadsworth Cengage Learning.
- Bell, J. (1999). *Doing your research project: A guide for first-time researchers in education and social science*. Buckingham: Open University Press.
- Borg, S. (2015). *Professional development for English language teachers: Perspectives from higher education in Turkey*. British Council.
- Brog, S. (2005). *Classroom research in ELT in Oman*. Ministry of Education.
- Burns, A. (1999). *Collaborative action research for English language teachers*. Cambridge University Press.
- Burns, A. (2005). Action research: An evolving paradigm? *Language Teaching*, 38(2), 57-74.
- Burns, A. (2009). Action research in second language teacher education. In A. Burns & J.C. Richards (Eds.), *The Cambridge guide to second language teacher education* (pp. 289-297). Cambridge University Press.
- Burns, A. (2010). *Doing action research in English language teaching*. Routledge.

Charmaz, K., & Belgrave, L. (2012). Qualitative interviewing and grounded theory analysis. *The SAGE handbook of interview research: The complexity of the craft*, 2, 347-365.

Craft, A. (1996). *Continuing professional development*. Open University Press.

Crookes, G., & Chandler, P. M. (2001). Introducing action research into the education of postsecondary foreign language teachers. *Foreign Language Annals*, 34(2), 131-140.

Dewey, J. (1929). *The source of science education*. Liveright.

Dikilitas, K., & Griffiths, C. (2017). *Developing language teacher autonomy through action research*. Palgrave Macmillan.

Dikilitas, K., & Dayli, D. (2018). Teachers' professional identity development through action research. *ELT Journal*, 72(4), 415-424.

Haig, B. D. (1995). Grounded theory as scientific method. *Philosophy of Education*, 28(1), 1-11.

Herring, S. (2004). Computer-mediated discourse analysis: An approach to researching online behavior. In S. Barb, R., Kling, & J. Gray, (Eds.). *Designing for virtual communities in the service of learning* (pp. 338-378). Cambridge University Press.

Hong, C., & Lawrence, S. (2011). Action research in teacher education: Classroom inquiry, reflection, and data-driven decision making. *Journal of Inquiry and Action in Education*, 4(2), 2011.

Kabilan, M. K., & Rajab, B. M. (2010). The utilization of internet by Palestinian English language teachers focusing on uses, practices and barriers and overall contribution to professional development. *IJEDICT*, 6(3), 56-72.

Kemmis, S., & McTaggart, R. (1988). *The action research planner*. Deakin University Press.

King, P., & Kitchener, K. S. (1994). *Developing reflective judgment*. Jossey-Bass.

Jones, J. (2004). The many benefits of a research component in English language teacher education: A case study. *Prospect: An Australian Journal of TESOL*, 19(2), 25-38.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge university press.

Levin, B., & Rock, T. (2003). The effects of collaborative action research on preservice and experienced teacher partners in professional development schools. *Journal of Teacher Education*, 54, 135-149.

Locke, T., Alcorn, N., & O'Neill, J. (2013). Ethical issues in collaborative action research. *Educational Action Research*, 21(1), 107-123.

Mackey, A., & Gass, S. M. (2005). *Second language research*. Lawrence Erlbaum Association.

McDonough, K. (2006). Action research and the professional development of graduate teaching assistants. *The Modern Language Journal*, 6, 33-47.

McIntosh, P. (2010). *Action research and reflective practice*. Routledge.

McNiff, J. (2013). *Action research: Principles and practice*. Routledge.

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

Molle, D. (2013). Facilitating professional development for teachers of English language learners. *Teaching and Teacher Education*, 29, 197-207.

Nunan, D. (1989). *Understanding language classrooms: A guide for teacher-initiated action*. Prentice Hall.

Pelton, R. P. (2010). *Action research for teacher candidates: Using classroom data to enhance instruction*. R & L Education.

Rainey, I. (2000). Action research and the English as a foreign language practitioner: Time to take stock. *Educational Action Research*, 8, 65-91.

Richards, J. C. (2008). Second language teacher education today. *RELC Journal*, 39(2), 158-177.

Richards, J. C., & Farrell, T. S. C. (2005). *Professional development for language teachers: Strategies for teacher learning*. Cambridge University Press.

Rienties, B., Brouwer, N., & Lygo-Baker, S. (2012). The effect of online professional development on higher education teachers' beliefs and intentions toward learning facilitation and technology. *Teaching and Teacher Education*, 29, 122-131.

Thorne, C., & Qiang, W. (1996). Action research in language teacher education. *ELT Journal*, 50, 254-262.

Vrasidas, C., & Zembylas, M. (2004). Online professional development: Lessons from the field. *Education and Training*, 46, 326-334.

Wallace, M. J. (1998). *Action research for language instructors*. Cambridge University Press.

Walsh, C. S., Shrestha, P., & Hedges, C. (2011). Leveraging low-cost mobile technologies in Bangladesh: A case study of innovative practices for teacher professional development and communicative English language teaching. In R. Kwan, C. McNaught, P. Tsang, F. L. Wang & K. C. Li (Eds.), *Enhancing learning through technology. Education unplugged: Mobile technologies and Web 2.0* (pp. 152-166). Springer Berlin Heidelberg.

Wang, Q., & Zhang, H. (2013). Promoting teacher autonomy through university-school collaborative action research. *Language Teaching Research*, 0(0), 1-20.

Wilson, S., & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. *Review of Research in Education*, 24, 173-209.

Yates, C. (2007). *Teacher education policy: International development discourses and the development of teacher education*. UNESCO.