

Investigating the Contribution of Action Research on Teachers' Professional Development¹

CELAL YIGIT

Educational Sciences Specialist

Ph.D., Gaziantep University, Turkey

Assoc. Prof. BİRSEN BAGCECI

Department of Educational Sciences, Faculty of Education

Gaziantep University, Turkey

Assoc. Prof. SERVET DEMİR

Department of Educational Sciences, Faculty of Education

Gaziantep University, Turkey

Abstract:

Professional development of high quality is basic to nearly all modern suggestions to improve education. Teachers' professional development is a significant factor for making reforms at any level effective. Action researches are conducted to understand, evaluate, and then change and improve educational practices. The goal of this study is to examine how effective action research is in teachers' professional development and determine level of usefulness for teachers' professional development. This study is a blended one in which qualitative and quantitative research method and techniques. The working group is comprised of 6 teachers of different branches working at a state primary school. Training Evaluation Forms and Self-Assessment Form were used as data collection tools. It was found out that action research adds up to teachers' professional development yet

Key words: action research, teacher's professional development, education

¹ This study is derived from an ongoing doctoral dissertation.

INTRODUCTION

Economic development is inevitable in order to manage change and developments in modern times and ensure sustainability. Taymaz (1992) states that economic development calls for education at advance level and workforce having qualities of high level lend impetus to social development. Here, how quality our educational system emerges. While Dromey (1993) expresses that educational system caught up with the changes and even pioneered others after the industrial revolution and Ozden (1999) education cannot get up with other sectors at present. Therefore, the qualifications of teachers and teacher training programs are among the prioritized topics in the studies directed at the quality of education (Sezal and Erkan, 1997; Sozer, 1991; Guven, 2001; cited in Karaca, 2008).

It seems that “content knowledge”, “pedagogical formation” and “World knowledge” are common in teacher training programs worldwide. As in other countries, some studies are conducted to define and improve teacher competences which cover fields of knowledge mentioned here above by such institutions as the Ministry of National Education and Council of Higher Education in Turkey. What is essential here is to ensure the sustainability in training qualified teachers (Ayas, 2009).

Professional development of high quality is central to almost any modern suggestion to enhance education. Policy makers are gradually figuring out that schools cannot be better than teachers and administrators working there (Griffin, 1983, s. 2; cited in Guskey, 2002). When considering all the studies into account, it is seen that what is more significant is teacher training (Artvinli, 2010: 3). Furthermore, there are various researches concluding that there is a great correlation between student success and teachers' professional preparation (Darling- Hammond, 2000a; Ferguson, 1991a; Goe, 2002; Goldhabar and Brewer, 2000; cited in. Pandey, 2012).

Teachers' professional development is a crucial factor for making reforms at any level effective. Successful professional development opportunities for teachers have a positive impact on students' performance and learning. Hence, if the goal is students' learning and to increase their performance, teachers' professional development should be regarded as an integral factor (UNESCO, 2003). Sagor (1992) points out that teachers are less cooperative and more isolated all day long when compared with other professional groups. Teachers hardly cooperate with each other except for previously-scheduled, well-structured meetings and in-service trainings for professional development. The researches carried out by academics are far from classrooms. The gap between research and practice has appeared to be a problem since 1930s when academics regarded themselves as either researchers or teacher trainers (Leglar and Collay 2002; cited in West, 2011).

There is a need for a professional development model which brings teacher groups together and in which opportunities are given to collect and reflect data in cases appropriate for their needs to facilitate change in beliefs and practice (Brockervill, 1997). As a form of professional development, action research is concerned with teachers' daily problems in practice rather than "institutional problems" (Johnson, 1993; cited in Nowlan, 2001).

Action research which is based on practice is directed at overcoming challenges we encounter in our daily lives and put the findings into practice immediately (McKay, 1992; Twine and Martinek, 1992; cited in Koklu, 2001). Action research is dependent upon significant experiences of the participants regarding the issue handled and oriented at implementation (Reason, 2001; Cited in. Koklu, 2001). Then, Bernauer (1999) describes action research as "practitioners' solutions to issues requiring an effective improvement (Cited in Koklu, 2001).

The significance of action research in particular is great for improving educational practices. Action researches are those

conducted to understand, evaluate, and then change and improve educational practices (Koklu, 2001). The aim of traditional professional development programs are to help improve practitioners' content knowledge and expertise. On the other hand, professional development support through action research help practitioners find new ways of solutions and is based on learning model. In traditional ones, trainers advise practitioners and practitioners put the advice into practice and trainers evaluate results, whereas, in action research approaches, practitioner expresses their opinions, puts them into practice and evaluate results with the help of advisors and others (Ferguson, 2011). Considering that teachers are an inevitable element of professional development and there are failures in some cases, literature compiled here and determining the effectiveness of action research in teachers' professional development could be an alternative to current approaches in professional development.

The aim of this study is to examine how effective action research is in teachers' professional development and determine level of usefulness for teachers' professional development. The problem statement of the study is "what is the contribution of action research in teachers' professional development. In line with that, the contribution of action research to teachers' professional developments at "reaction" and "learning" levels according to the Kirkpatrick Program Evaluation Model are to be studied as well.

METHODOLOGY

This study is a blended one in which qualitative and quantitative research method and techniques are used together to diminish the restrictions of using only either of them. Blended methods include collecting and mixing or integrating both qualitative and quantitative data (Cresswell, 2013). These approaches represent different ends of a process rather than

opposite poles (Newman and Benz, 1998; Cited in Cresswell, 2013). A study tends to be more qualitative than quantitative or vice versa, whereas blended methods are just in the midst of this process (Cresswell, 2013).

As the applicability of action research in the professional development of teachers, a need to study in depth appeared. Hence, this study is a case study, one of qualitative research methods. Qualitative case study is an approach facilitating the discovery of a phenomenon in its own context, using a variety of data. What is in common between Yin and Stake, who pursue different methodologies in case studies is that the issue of interest is discovered well and the essence of that phenomenon is disclosed (Baxter and Jack, 2008). At the first stage of the study a pilot study was offered to 25 participants and a group of 6 people as the focus group for 18 hours about Action Research for the Professional Development of Teachers.

Data Collection Tools

Firstly, Training Evaluation Form developed by the South Marmara Development Agency was used to determine the problems concerning the planning, program and opinions and suggestions of the participants of the teacher training program within the scope of Action Research for the Professional Development of Teachers. The form is a 5-point scale and a range from 1 (not good at all) to 5 (very good) is used in the evaluation of the responses. Descriptive analysis was used in the analysis of the data. The findings have been interpreted and suggestions have been put forward.

Secondly, the sample assessment form included in the manual by Steinert and Quillet (2010) and translated into Turkish as well by the researchers was adapted and implemented to find solutions for the problems concerning the planning, program and opinions and suggestions of the participants of the teacher training program as the Training Daily Evaluation Form. The form is a 5-point scale and a range

from 1 (not good at all) to 5 (very good) is used in the evaluation of the responses. Descriptive analysis was used in the analysis of the data. A frequency analysis was made for the responses to the open-ended parts of the form. The findings have been interpreted and suggestions have been put forward.

Finally, General Competences of the Teaching Profession and Special Field Competences were prepared with the contribution of national and international experts and shareholders by the Ministry of National Education in Turkey. School-based Professional Development Manual was published in 2007 (MEB, 2007). As one of the quantitative data collection tools in the study, Self-Assessment Form was prepared to let teachers assess themselves from their own points of view within the scope of the School-based Professional Development program. The form is comprised of six dimensions: Personal Development-Personal Values and Professional Development-Professional Values, Getting to Know Students, Learning-Teaching Process, Follow-up and Assessment, School-Family-Society Relations and Program and Content Knowledge (MEB, 2007). The form is a 5-point scale and a range from 1 (I needs to be improved certainly) to 5 (very competent) is used in the evaluation of the competences. The findings have been interpreted and suggestions have been put forward.

Working Group

First of all, a pilot training was offered to determined problems likely to emerge in the workshop and minimize them. The working group of this pilot study is comprised of 25 kindergarten teachers and assistant teachers in a private school in Gaziantep, Turkey.

Then, the working group of the focus implementation study is comprised of 6 teachers of different branches working at a state primary school with quite limited opportunities who would like to take part voluntarily.

FINDINGS

As for the contribution of Action Research to the Professional development of teachers according to the "Reaction" level of the Kirkpatrick Assessment Model, Training General Evaluation Form and Daily Evaluation Forms were used and the findings are as follows:

First of all, the participants responded to all items at the level of "Very Good". The items with the highest gratitude are "treat" (4,83). The items with the lowest percentage are length of time spent in the training (4,33), materials in the training (4,33) and the level of materials to be research-based (4,33) though they are regarded "Very Good".

The second part of the Training General Evaluation Forms is about the Trainer. All the trainings were offered by one of the researchers under the guidance of the others. The participants responded to all items at the level of "Very Good". The items with the highest satisfaction are "Ensuring motivation and communication skills" and "Being able to use all the tools on time (5,00), whereas those with the lowest percentage is "Presenting the issue with proper methods and techniques" (4,33) and "Studying the issue according to the level of the participants" (4,33).

Next, according to the results of the 5-likert type items of the Action Research Training Daily Evaluation Forms, the general satisfaction is at the level of "Good". The items with the highest percentages and regarded as "Very good" are "Literature review, reading and taking notes" (4,50), "Introduction" (4,33), "Problem Specification Table" (4,33), "Creative Problem Solving" (4,33), "Preparing Checklists for Students" (4,33), "Online Survey" (4,33) and "Reporting Findings" (4,33). Then, three items with the lowest percentages are "Preparing action research suggestion form" (3,50), "Assessing a research" (3,67) and "Creating, Revising and

Editing the First Draft Paragraph" (3,67), though they are at the level of "Good".

Then, based on the open-ended parts of the form, it could be said that the parts in the training which are regarded beneficial most are "Online Survey" (three people) and "Brain Storming" (two people). Furthermore, six people stated that they would suggest the Action Research training to others and six people stated that it contributes to the professional development. What's more, teachers stated "different educational environments could have been observed and comparisons could have been made", "they could have made the training setting better" and "the topics could have been explained in detail more" in the part they are asked what they could have done in a different way". Finally, some teachers made some additional comments as follows: "It helps us gain different perspectives for the problems" (positive), "It is the first time I have taken part in such a training. It was quite successful" (positive), "I could have been more active" (self-criticism), "It was a nice and different study" (positive), "Online survey could have been longer" (suggestion), "Opinions could be exchanges with bigger groups" (suggestion) and "Reading resources about my problem was very enjoyable at the literature review step" (positive). As seen clearly, more than half of the comments made are positive, while the rest are either suggestions or self-criticism.

Another point of research is pertaining to the contribution of the action research method to teachers' professional development at the level of "Learning" of the Kirkpatrick program development model. The changes in the teachers' knowledge, skills and attitudes were tried to be determined through their self-assessment which were administered prior to and after the action research training as pre- and post-test.

As for the results, the first sub-dimension of the self-assessment form is "Personal Development-Personal Values /

Professional Development – Professional Values” and the first part of this sub-dimension is “Personal Development-Personal Values”. It has been found out that the pre-test average of that section is “Acceptable”, whereas the post-test average is “Competent”. Though the teachers assessed themselves positive, they changed their attitude from “Needs to be Improved” in the pre-test to “Competent” in the post-test in the “Contribution to the Improvement and Development” and “Knowledge of Regulations” sub-dimensions. On the other hand, the teachers assessed themselves as “Competent” about the second section of that part, “Professional Development-Professional Values” and made positive comments on all the secondary sub-dimensions. In general, for the first sub-dimension, the teachers considered themselves to be as “Competent” before the training, while they regarded themselves as “Very Competent” after the training.

Next, there are significant differences among the teachers’ opinions about “Getting to Know Students”. Even though they considered themselves as “Average” prior to the training, they stated that they were “Very Competent” after the training. Furthermore, it is seen that the same change was spotted in the secondary sub-dimensions (Getting to Know Developmental Characteristics and Guiding Students).

For the third sub-dimension of the form, “Learning-Teaching Process”, a positive change occurred again in the teachers’ opinions. The teachers considered themselves to be “Average”, but after the training, they stated that they were “Very Competent”. Though there are positive changes in all the secondary sub-dimensions, “Diversification of Teaching by Taking Individual Differences into Account”, “Behavior Management” and “Organizing Learning Settings” from “Average” to “Very Competent”.

Also in the fourth sub-dimension of the form, “Follow-up and Evaluation”, there are positive changes in the assessments of the teachers as in the other parts. Their opinion (Average)

prior to the training turned into “Competent” after the training. Though there are positive changes in all three secondary sub-dimensions”, the teachers assessments turned from “Average” to “Competent” in “Reporting Standards and Ethics”.

In the fifth sub-dimension of the form “School, Family-Society Relations”, the teachers considered themselves to be “Average” before the training, whereas they thought to be “Competent” after the training. Though there are positive changes in both secondary sub-dimensions, their opinions turned from “Average” to be “Competent” in “Contribution to Family-School Cooperation”.

Solely in the sixth and final sub-dimension of the form, “Knowledge of Curriculum and Content”, there are no changes in the teachers’ opinions and they considered themselves to “Competent” both before and after the action research training. Although there is no change in the general average of this sub-dimension, there are positive changes in the secondary sub-dimensions.

To sum up, despite considering themselves to be “Average” prior to the training, the teachers regarded themselves as “Competent” after the action research training. There are positive changes in general average of five sub-dimensions, while there is no change in the sixth one. Yet, there are also positive changes in all the secondary sub-dimensions.

RESULTS AND DISCUSSION

The results derived from the findings of the problems stated at the beginning of the study are presented in this section. The first sub-problem of the study is related to the contribution of action research to the professional development of teachers at the level of “Reaction” of the Kirkpatrick Program Development Model. According to the “Training Assessment Form” and “Action Research Training Assessment Form”, the teachers rated all the items “Very Good” and expressed their gratitude at

the highest level. In Section B, which is about the Trainer, they also rated as "Very Good". All the participants assessed "Ensuring motivation and communication skills", "Being able to use all the tools on time", "Presenting the issue with proper methods and techniques" and "Studying the issue according to the level of the participants". Hence, it can be concluded that the trainer performed well in the action research training.

The items with the highest percentages are "Literature review, reading and taking notes", "Introduction", "Problem Specification Table", "Creative Problem Solving", "Preparing Checklists for Students", "Online Survey" and "Reporting Findings". Then, three items with the lowest percentages are "Preparing action research suggestion form", "Assessing a research" and "Creating, Revising and Editing the First Draft Paragraph" in spite of the fact that they are at the level of "Good". Then, the parts in the training regarded to be the most beneficial are "Online Survey" and "Brain Storming". "Being Able to Exchange Ideas", "Seeing different problems", "Creative Problem Solving", "Preparing Checklists for Students", "Interview", "Reporting Findings", "Tool-Goal Analysis", "Surveying Websites", "Results", "Suggestions", "Discussion and Problem Statement Table". All the teachers involved in the study stated that they would suggest the action research training to others and half of them expressed that it contributed to their professional development.

The findings concerning the second sub-problem of the research were obtained through the Self-Assessment Form by the Ministry of Turkish National Education", which were implemented before and after the meeting. The teachers changed their opinions from "Competent" to "Very Competent" in the assessments. Based on the results, it is concluded that action research contributes to the professional development of teachers. Both the teachers' high level of satisfaction regarding the training and positive changes in their self-assessment as pre- and post-test show the successful impact of action research

upon teachers. The participants of the study stated that they would recommend the method to others.

The positive impact of action research is vastly included in the literature. It is stated that teachers involved in an action research feel better (eg. confident, motivated and autonomous) as well as getting informed and understanding their students better. Then, they have better cooperation with their colleagues. It is being used more commonly as a professional development tool. Relying on getting professional development assistance from external providers has numerous disadvantages, whereas action research, a continuous, cheap, practical, integrated with teachers' routine work, helps teacher own their teaching more. (Borg, 2015). Furthermore, Zeichner (2003) puts forward that in certain circumstances, action research could lead to revive teachers' passion for teaching and have them understand the significance of their profession which many teachers appear to lose (as cited in Forde, 2015).

Finally, Bailey (2012) mentions both some advantages and drawbacks of action research. As the advantages, he mentions reflection on practice, being more conscious and collaborative, less burnout, improvement in teaching and making more contacts between theory and practice. As for the disadvantages, action research is said to consume time more and revealing unwanted information about teachers' ways of teaching (as cited in Yucel and Bos, 2015).

Dependent on these results, the following suggestions could be made:

- Considering the positive effect of action research on the education-teaching process on teachers, action research trainings could be periodically carried out to achieve success in professional development.
- Action research trainings could be extended to a larger group.

- School administrators could be involved in action research trainings that have positive effect on teachers' professional development; thus, teachers' need for support and consultation during the process could be satisfied by administrators.
- The project could be extended by what's gained in action research trainings by teachers' carrying out their own action researches about their own problems concerning education.
- In order to prevent action researches from being time-consuming, action should be planned well.

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