

A Proposed Model for Action Research Skills for Teachers

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Abstract

The study aimed to come up with a model of action research skills for teachers. The study used the descriptive survey method, as well as the questionnaire tool. The study showed that the appropriate action research skills for teachers are determined by the following model: 1- Problem identification skill 2- Information gathering and hypothesis formulation skill 3- Conducting action research skill 4- Report writing skill. The study recommended making use of the action research list and designing educational and training programs for teachers with the aim of developing these skills for their education and intensifying the study of action research in teacher preparation programs.

Keywords: *Action research skills, teachers, teaching*

Introduction

The teacher is one of the key elements of the educational process. Therefore, this element calls for continuous professional development in all aspects and fields. It also calls for the development of all kinds of skills especially those related to scientific research.

One of the most common approaches to professional development for teachers is action research. By reflecting on the daily practices of the teaching profession, teachers would be able to modify and develop their teaching practices in order to deal with problems and avoid randomness in their teaching performance as much as possible (Shaheen, 2013). It is a process through which teachers and staff in the educational field study and reflect. Their practices for solving real-world problems they encounter in their work aim to improve them (Al-Duraij, 2007). There is no doubt that the teacher's transformation into a practicing researcher helps him/her to propose creative ideas and methods and experiment with them instead of receiving information and a solution (Haroun, 2005). Scientific research is of paramount importance in excellence and progress at all levels. Society aspires to supremacy and renaissance, so it must pay attention to scientific research (Abboud, 2018).

Action research contributes to the professional development of the teacher, and integrates with his/her knowledge of the specialty: how to teach. It increases his analytical abilities, self-awareness, and critical thinking. It also improves communication among teachers and students, educational researchers, school administration, and society (Hussein and Darwish, 2015). Action research is one of the most effective opportunities and methods for teacher professional growth for many reasons. As a result of action research, the teacher is required to research ways to solve classroom problems. This is to find out their causes through scientific methodology. With direct and permanent contact with students,

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as well as the problem of research (Salim, 2018), action research focuses on topics or field research problems that are specific to each teacher's needs. It is also characterized by its consideration of the privacy of the educational context in which the teacher works (Ali, 2017). This adds to the importance of action research and its inclusion in teachers' professional development priorities.

Study Problem

During the teaching process, teachers encounter obstacles and problems. Teachers may be confused about the mechanism of overcoming them or the appropriate educational solutions. Whether these obstacles and problems result from teaching performance, learners' behavior, or the classroom environment, they need to be studied and educational solutions reached. This requires developing action research skills among teachers. This is preceded by an attempt to find a model for action research skills. Therefore, scientific studies confirm the importance of conducting action research among teachers, and investing it in addressing learning and teaching problems. Scientific studies such as Muhammad (2015), Al-Muzaini and Al-Mazrou' (2012), and Al-Otaibi (2016) argued for participatory action research in all schools. Taghreed study (2006) recommended the necessity of action research to address teachers' problems, and the importance of educational supervision including the research aspect of teachers. Through a survey study on more than forty Qassim educators, teachers were asked, "Have you ever done empirical research?" The answer came as a no from everyone (Al-Ghudouni, 2022). Therefore, the current study seeks to prepare a model of action research skills suitable for teachers.

Study Questions:

The current study seeks to answer the following question:

- What is the suggested model for action research skills for teachers?

Purpose of the study

The study aims to identify the appropriate action research skills for development among teachers, and to come up with a proposed model for action research skills for teachers.

Study Significance

The study presents a proposed model in action research skills for teachers to benefit from in improving the learning and teaching process. It draws researchers' attention to a topic that can be used in scientific seminars and developmental studies.

Study Term

Action research skills refer to the scientific steps and stages that lead to a scientific result towards an educational or learning problem facing the teacher inside and outside the school.

Action research

Abu Jalala (2001) indicated that action research can be traced back to the 1970s, when Lawrence Stenhouse presented, in his book *An Introduction to Curriculum Research and Development*, models of how to develop curricula, as he refers to the most important methods of curriculum development. The main methods of developing curricula holistically are attributed to the researcher-teacher model. Al-Duraj (2007) defined it as a type of research that enables teachers and all practicing educators to study and examine their performance. It also tackles the problems that hinder their work in classes and schools. Bakhit and Al-Qaoud (2012) defined it as an organized process based on thinking and self-reflection on educational practices by teachers. It aims to solve the problems they face in the teaching process. It specifies the results of their activities aimed at developing strategies designed to improve those practices using research methods. Al-Enezi (2015) defines it as "a participatory research activity that is organized and

disciplined within certain limits." It is practiced by staff in educational institutions to reflect on their practices, and evaluate their knowledge and teaching skills in realistic environments in an effort to address the problems facing them and achieve the planned educational goals with the utmost perfection. Salim (2018) defines it as "practical applied research, in which the teacher is a practicing researcher who solves realistic problems associated with him/her, and tries to use research according to a scientific methodology as a way to reflect on his/her activities." The teacher takes appropriate decisions to improve performance. It is also defined by the Saudi Education and Training Evaluation Commission (2019) as "applied scientific research carried out by teachers or school leaders with the aim of applying theoretical knowledge and scientific laws to solve specific real-world problems, and to develop existing educational practices within a practical action framework oriented towards improving educational work and related practices."

Significance of action research

A number of researchers, Al-Duraj (2007), Hussein and Darwish (2015) and Qoura (2016) pointed out the importance of action research as follows:

- It gives teachers and educational practitioners strength and self-confidence.
- It helps teachers develop professionally.
- Problems can be solved, and practical practices can be improved.
- The teacher develops analytical ability, self-awareness, and critical thinking.
- It improves communication among teachers and students, educational researchers and school administration.
- It helps teachers develop skills and knowledge directly relevant to their students and classes.
- It encourages openness to creative ideas.

Action Research Skills

Al-Ghudouni (2022) indicated that some various models of action research skills appeared in the scientific literature as follows:

1. The Al-Duraj Model (2007) comprises:
 - Definition of the research problem
 - Review of previous studies
 - Formulation of hypotheses or research questions
 - Designing the research plan and procedures
 - Means and tools for observation and data collection
 - Implementation of the research plan, and changes to "preliminary measures to solve the problem"
 - Collection, organization and analysis of data, reflection and discussion sessions
 - Drawing conclusions and solving the problem
2. The Parsons and Brown model: It consists of five skills: defining the problem, reviewing the literature related to the problem, formulating hypotheses, developing a plan of action, collecting and analyzing data, and drawing conclusions (Al-Sayed & Al-Omari, 2015).
3. The Johns Hopkins University Education Technology Center Model: It is the five-step model. Action research process passes through a set of steps, and each step includes

five points: the research problem, the collection of sufficient data about the research topic, the preparation of the research plan, the implementation of procedures, analysis and interpretation. Finally, writing a research report (Selim, 2018).

4. The 2017 Model of the Collaborative Action Research Center, University of Pepperdine, California, USA. This action research model moves through interrelated stages. It starts with reviewing current practices, identifying the research problem by reflecting on current practices. It then provides a possible solution to the problem, and applying the solution. This is followed by evaluating the solution, then modifying the practice if the solution is successful, or trying another option if it does not work, then reviewing the practice after the modification (Selim, 2018).

5. The Stephen Kemmis model, which considers action research as a spiral process that includes cycles, and each cycle includes four steps: planning, action, observation, and reflection. Based on the above discussion, most of the models agreed on the following skills shown in Figure 1:

- Problem definition
- Literature review
- Formulating hypotheses
- Designing the research plan
- Data collection and analysis
- Presenting results and a research report

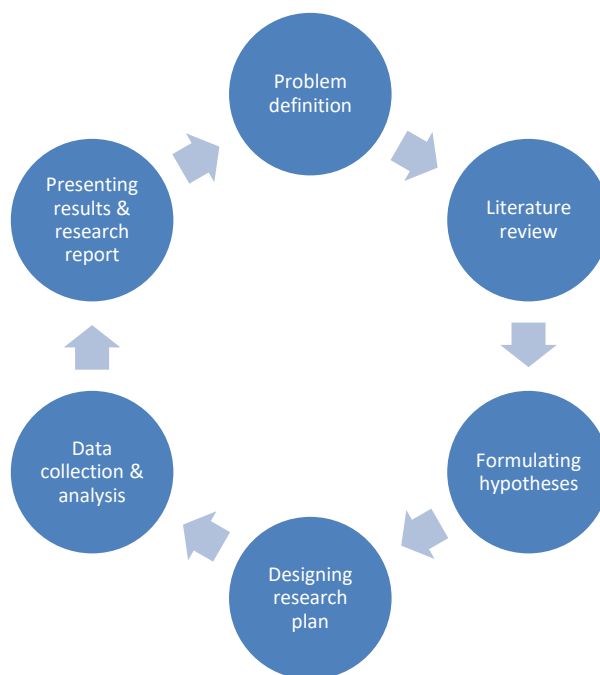


Figure1. Action Research Skills

A number of studies have addressed the topic of action research. Bakhit and Al-Qaoud (2012) aimed to reveal the impact of a training program on developing action research skills among social studies teachers. The study used survey and semi-experimental methods. The social studies teachers (No. 15) were deliberately chosen, and the study used the test tool. The researcher prepared a training program on action research skills:

knowledge of action research, defining and formulating an action research problem, designing an action plan, formulating hypotheses, data collection, analyzing data, and presenting results. The study produced several results. The total score for testing social studies teachers' action research skills came below proficiency. On the level of

knowledge of action research and the extent of knowledge of action research skills, the results indicated that there was a significant difference between before and after the program. Ali (2017) aimed to determine the degree of participation of Arabic language teachers in action research and its use in developing Arabic language teaching. The study used descriptive approaches. The study sample consisted of (60) male and female teachers. It also used the questionnaire tool and the observation checklist. The study indicated that the study sample's knowledge of action research was medium. The classroom problem definition was also medium. Data analysis, interpretation and writing reports were weak.

Yigit and Bagceci (2017) investigated action research's contribution to teachers' professional development. In line with this goal, a group of teachers were asked for their opinions. The study working group is comprised of six teachers working at a state primary and middle school. This is an example of a case study, one of the methods of qualitative research. Content analysis techniques were used in the data analysis. Teachers expressed that action research had a positive impact on their professional development in various aspects. Han (2017) indicated that in-service language teachers' professional development is a crucial factor that influences teaching and learning effectiveness. Educational action research is considered by many researchers and scholars as an effective way or approach to language teachers' professional development. It reports on a case study of in-service English language teachers doing action research within a collaborative action research project. The focus of the case study is investigating the problems and difficulties that English language teachers encounter in doing action research. Some solutions to the problems are provided. This research sheds light on educational action research practice and application. In the action research project, teacher researchers act primarily as scaffolding by guiding, counseling, and supporting English language teachers. The measures and practices undertaken to solve the problems English language teachers are confronted with in doing action research shall enrich the development of action research theory.

Abboud (2018) attempted to identify the degree to which Islamic education teachers possess scientific research skills in Jordan from their point of view. The study used the descriptive survey method and the questionnaire tool. The study sample included (250) male and female teachers. The results of the study showed that Islamic education teachers' scientific research skills ranged from a moderate degree. There are statistically significant differences due to gender impact in all fields and in favor of females. Al-Shawwara (2019) aimed to reveal the extent to which postgraduate students in the Department of Education at the Faculty of Da'wah and Foundations of Religion at the Islamic University possess educational research skills. The study used a descriptive analytical approach, and the questionnaire tool. A sample of 95 students and 20 faculty members participated in the study. Students displayed high levels of performance on the study tool based on the arithmetic average of arithmetic average. Based on the faculty members' views, it was average. There are statistically significant differences between postgraduate students in their educational research skills. This is depending on the academic path in the skills of defining the research problem, research procedures, presenting and discussing results, and writing recommendations and references.

Methodology

The current study used the descriptive survey method.

Study tool and procedures

The study tool was the questionnaire, and its validity was confirmed using the arbitrators' validity. The questionnaire was presented to a group of specialists in the field.

a) The validity of the questionnaire tool through:

- Validity of the arbitrators: The questionnaire was presented to expert arbitrators and specialists in the field.
 - The validity of the questionnaire's internal consistency.
- b) Reliability of the questionnaire

To ensure the reliability of the questionnaire, the Cronbach Alpha reliability coefficient was used, which is suitable for this type of measurement tool. The reliability of the questionnaire axes was calculated, as well as the total score. The reliability coefficient is shown in Table 1.

Table 1 The reliability of the study tool dimensions

Dimension	Alpha coefficient
Action Research Skills	0.964

It is clear from Table 1 that the questionnaire reliability coefficients are highly reliable.

Study results and interpretation

1. The question of the current study is: What is the proposed model for action research skills for teachers?

To identify the appropriate action research skills available to Islamic education teachers at the high stage, the researcher did the following:

- Refer to the literature and previous studies.
- Prepare a preliminary list of action research skills.
- Present the list to a group of arbitrators to get their opinion on action research skills.

After taking into account the arbitrators' opinions and observations, a model of action research skills for teachers was reached. This model was agreed upon by the arbitrators as follows as shown in Figure 1:

- Problem identification
- Collecting information and formulating hypotheses
- Action research procedures
- Report writing



Figure 2 Suggested model of action research

Several studies report similar results, which refer to these skills or their generality (Bakhit & Al-Qaoud, 2012).

Study recommendations

In light of the study findings, the following recommendations can be made:

- Benefiting from the action research list and designing educational and training programs for teachers.
- Intensifying the study of action research in teacher.

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