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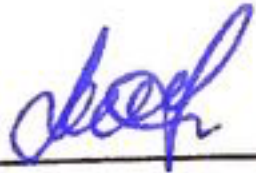
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Teachers' Understanding of Action Research:

a Qualitative Case Study of a Specialized School in Kazakhstan

Laura Baitokayeva

Submitted in partial fulfillment of the requirements for the degree of

Master of Science

in

Educational Leadership

Nazarbayev University Graduate School of Education

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Teachers' Understanding of Action Research:

a Qualitative Case Study of a Specialized School in Kazakhstan

Abstract

A number of positive changes have occurred recently in the educaton system of Kazakhstan. The teachers, as primary implementers, are playing a major role in implementing these changes at schools. Therefore, the teachers are often seen as agents of change, particularly in the specialized schools that have been opened throughout Kazakhstan in order to work as 'laboratories' for developing best practices and disseminate the same to the mainstream schools in the country.

In the specialized schools, the teachers have been encouraged to be involved in action research, a collaborative inquiry-focused learning approach, which is aimed at developing collaborative and inquiry skills of the teachers. After the teachers were introduced to action research, they have participated and presented their research papers in various conferences within and outside the country. Their action research reports and articles are often published in the educational journals.

However, there has hardly been any study that looks exclusively into how the teachers, who are obliged to engage in action research, perceive and approach action research. Therefore a qualitative case study research was conducted to explore teachers' understanding of the notion and concept of action research, the way they conceptualize and implement action research as a way to improve their teaching practice, and to identify the challenges they face in conducting action research in their school. Using maximum variation purposeful sampling strategy, the participants selected for this study included seven teachers and three action research course moderators.

The findings of this study have been derived mainly from the semi-structured interviews, reviews of action research reports and articles written by the teacher

researchers and observations of in-school course sessions organized for teachers doing action research in one of the specialized schools in Kazakhstan. The findings provide useful insights about teachers' conceptions, understanding and approaches to action research, the opportunities and support available to them to facilitate their research work, and the challenges they face in doing research along with their routine school work.

The findings of the study will help the school leadership know the different, at times contradicting, views held by teachers about action research. The practitioners will also be better aware of conducting action research effectively, handling research methods, collecting data and analyzing them in a systematic manner. The study may contribute to developing deeper understanding of action research in other schools where teachers do engage in action research. It may also contribute to literature on action research, especially in the context of Kazakhstan.

Keywords: action research, teachers' understanding, collaboration, research skills, implementation and practice.

Мұғалімдердің іс-әрекеттегі зерттеу туралы түсінігі:

Қазақстандағы мамандандырылған мектептегі сапалы кейс стади

Аңдатпа

Соңғы жылдары Қазақстандағы білім беру жүйесінде көптеген оңды өзгерістер орын алды. Мұғалімдер, негізгі орындаушылар ретінде, мектептерге осы өзгерістерді енгізуде басты рөл атқарады. Соның ішінде мұғалімдер, оқытудың үздік тәжірибелерін дамытып, оларды жалпы орта білім беретін мектептерге тарату мақсатында бүкіл Қазақстан бойынша ашылған мамандандырылған мектептерде өзгерістер енгізуші болып табылады. Бұл мамандандырылған мектептер озық педагогикалық тәжірибені дамытып, оны жалпы білім беретін мектептерге тарататын «зертхана» ролін атқарады.

Арнайы мамандандырылған мектептерде, мұғалімдер іс-әрекеттегі зерттеумен айналысуға шақырылады. Іс-әрекеттегі зерттеу - мұғалімдердің бірлесіп жұмыс жасау мен сұрақ қоя білу дағдысын дамытуға бағытталған зерттеу әдісі. Іс-әрекеттегі зерттеумен айналыса бастаған мұғалімдер мемлекет ішіндегі және шет елдерде өткізілетін конференцияларға қатысып, өздерінің зерттеу нәтижелерін таныстырып жүр. Олардың зерттеуі негізінде жазылған есептері мен мақалалары білім беру журналдарында жарық көреді.

Дегенмен, мұғалімдердің іс-әрекеттегі зерттеуді қалай түсінетіндігін және қалай жүргізетіндігін қарастырған зерттеу жұмыстары жоқтың қасы. Аталмыш сапалы кейс стади мұғалімдердің іс-әрекеттегі зерттеу ұғымын түсіну, өздерінің оқыту тәжірибесін жақсартуда іс-әрекеттегі зерттеуді жүргізу, іс-әрекеттегі зерттеу жүргізу барысында кездесетін қиындықтарын анықтау мақсатында өткізілді. Зерттеуге максималды вариациялық мақсатты іріктеу әдісі арқылы таңдалған жеті мұғалім мен үш курс модераторы қатысты.

Бұл зерттеу жұмысының нәтижелері жартылай құрылымдалған интервьюлар, мектепішілік іс-әрекеттегі зерттеу курсының сессияларын бақылау және мұғалімдердің жарық көрген іс-әрекеттегі зерттеу есептері мен мақалаларын талдау негізінде алынды. Зерттеу нәтижелері мұғалімдердің іс-әрекеттегі зерттеу туралы тұжырымдамалары және түсініктерін, оларға зерттеу жүргізудегі мүмкіндіктері мен қолдау түрлерін, күнделікті мектеп жұмысымен қатар жасалатын зерттеу жүргізудегі кездесетін қиындықтарын көрсетеді.

Бұл зерттеу жұмысының нәтижелері мектеп көшбасшыларына мұғалімдердің іс-әрекеттегі зерттеу туралы көзқарастарымен танысуға көмектеседі. Зерттеуші практиктер іс-әрекеттегі зерттеуді тиімді жүргізуді, зерттеу әдістерімен жұмыс жасауды, мәлімет жинауды және талдауды жүйелі түрде жүргізу туралы білімдерін толықтырады. Зерттеу, сонымен қатар, басқа да мектеп мұғалімдерінің іс-әрекеттегі зерттеуді тереңірек түсінуіне үлес қосуы мүмкін. Ол, әсіресе Қазақстан ішіндегі іс-әрекеттегі зерттеуге қатысты әдебиеттердің қатарын толықтыра алады.

Кілт сөздер: іс-әрекеттегі зерттеу, мұғалімдердің түсінігі, бірлескен жұмыс, зерттеу дағдылары, жүзеге асыру және тәжірибе.

Понимание исследования в действии учителями:

качественный кейс стади в специализированной казахстанской школе

Абстракт

В последнее время в системе образования Казахстана произошел ряд позитивных изменений. Учителя, как основные исполнители, играют важную роль в реализации этих изменений в школах. Поэтому учителя являются лицами, вносящими перемены и преобразования в образовательную систему, особенно в специализированных школах, открытых по всему Казахстану. Эти специализированные школы являются «лабораториями» для разработки передового опыта и распространения его среди общеобразовательных школ в стране.

В специализированных школах учителей призывают участвовать в исследовании в действии. Исследование в действии представляет по сути учебный подход, который основан на совместной работе, направлен на выработку навыков формулирования вопросов исследовательского характера. Результатом проведения данной исследовательской работы является участие в конференциях как внутри страны, так и за ее пределами. Их исследовательские доклады и статьи также могут публиковаться в образовательных журналах.

Несмотря на достаточно внушительный срок внедрения данного вида исследования в педагогическую практику, нужно отметить малоизученность степени и характера восприятия исследования в действии самими учителями. Поэтому было проведено качественное кейс стади, чтобы изучить понимание учителями концепции исследования в действии, а именно то, как они воспринимают и реализовывают исследование в действии как способ улучшения своей педагогической практики. Следующей задачей кейс стади является выявление проблем, возникающих в ходе проведения исследования в действии. Участники для этого исследования были

отобраны посредством целевой стратегии выборки с максимальными вариациями. Ими стало семь преподавателей и три модератора курсов по исследованию в действии.

Результаты этого исследования были получены в основном из полуструктурированных интервью, анализов докладов и статей в рамках исследования в действий, и наблюдений за курсами в школе, организованными для учителей, проводящих исследование в действии в одной из специализированных школ в Казахстане. Полученные результаты дают полезную информацию о понимании и подходах учителей к исследованию в действии, о возможностях и поддержке, которые им предоставляются для содействия их исследовательской работе, и о проблемах, с которыми они сталкиваются при проведении исследований, наряду с их обычной школьной деятельностью.

Результаты исследования помогут руководству школы ознакомиться с различными, порой кардинально противоположными взглядами и отношением учителей к исследованию в действии. Учителя, повсеместно занимающиеся данным видрм педагогического исследования, будут лучше осведомлены о том, как эффективно проводить исследование в действии, обрабатывать методы исследования, собирать данные и систематически анализировать их. Это исследование может способствовать более глубокому пониманию исследования в действии и в других школах. Оно также может внести вклад в литературу по исследованию в действий, особенно в контексте Казахстана.

Ключевые слова: исследование в действии, понимание учителей, сотрудничество, исследовательские навыки, реализация и практика.

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Chapter 1: Introduction

The title of this thesis is "Teachers' understanding of Action Research: a qualitative case study of a specialized school in Kazakhstan", and it examines teachers' understanding and implementation of action research along with the challenges they face when conducting their research. This chapter presents the background information about commencement of action research in the country, statement of the problem, research purpose, research questions and significance of the study. The structure of the thesis is introduced at the end of the chapter.

Background Information

The educational system in Kazakhstan is undergoing great changes, as education has become one of the top priorities in the government policy (Fimyar, Yakavets, & Bridges, 2014). In addition, the country is endeavouring to join the ranks of the 30 most competitive countries in the world. One of the driving forces on the way to this goal is the improvement of the system of education (MES, 2010). That is the reason why a lot of reforms are taking place in the educational system of Kazakstan in the current years. The key role in implementing the reforms is played by teachers. Thus, they are required to become agents of change.

Fullan (1993) identified four main intertwined skills needed for "building greater change capacity" (p. 2). The first is personal vision-building, which serves as an impetus for change, and facilitates teachers to examine why they have selected the teaching pathway. The second one is mastery, the skill leading to achieve deeper understanding and constructing new mind-sets. The third is inquiry, through which "norms, habits, and techniques for continuous learning" are incorporated within a person's self (Fullan, 1993, p. 4). This means, as change agents, teachers become lifelong learners who inspire their students to do the same.

The fourth equally important skill is collaboration. This particular skill is evolving into an essential one requiring a person to be able to cooperate with others in small and large communities. When inquiry and efficient collaboration merge, they lead to personal strength (Fullan, 1993). Some specialized schools in Kazakhstan have adopted a collaborative inquiry-focused learning approach built on an action research strategy and recognized as a "bottom up" model of [school] development" (McLaughlin, McLellan, Fordham, Chandler-Grevatt, & Daubney, 2014, p. 1). This approach is intended to foster collaborative and inquiry skills of the teachers with the help of action research. A special three-year programme was developed by the team from the Faculty of Education at Cambridge University and implemented in a number of selected schools in Kazakhstan (McLaughlin et al., 2014).

In the spring of 2011, the government set up the Centers of Excellence. The main function of this Centre is to implement an in-service programme of teachers' training and professional development system (Fimyar, Yakavets, & Bridges, 2014). The programme comprises three levels, which are supported by special training materials that have been developed in collaboration with the team from Cambridge University (Nazarbayev Intellectual Schools, n.d.) In the third level of the programme teachers are trained to bring about significant changes into their teaching practice by utilizing new teaching approaches and assessment techniques, while in the second level teachers are taught to contribute to the professional development of their colleagues by providing coaching and mentoring. Additionally, teachers conduct action research in their classrooms as a tool for improving their teaching practice. Finally, after completion of the first level programme teachers are expected to bring about changes into the whole school by offering and implementing their school development plan (Fimyar, 2014).

The programme for each level course is accompanied with the teacher's guide prepared by AEO Nazarbayev Intellectual Schools. The teacher's guide for the second level course provides information about the history and definition of school action research as well as its types. There is also a separate chapter, which describes the action research cycle providing explanations and some examples (Nazarbayev Intellectual Schools, 2012).

Problem Statement

Since its establishment in 2015, the specialized school selected for this study has been encouraging all its teachers to be actively engaged in action research. Upon completion of the second level course, schoolteachers are expected to work on enhancing their teaching practice by incessantly being involved in action research. Being a teacher of the specialized school also implies becoming an active action researcher. Action research is one of the requirements in the system of teacher attestation. A teacher of the specialized school is restrained from being promoted into "an expert teacher" unless they successfully conduct action research.

In the specialized school where this study was conducted, the number of teachers doing research in 2015-2016 academic year was 32, while it rose to 33 in the 2016-2017 school year. In 2017-2018 academic year, 62 teachers reported to be doing action research. This number increased to 85 in the following year.

The school is aspiring to create favorable conditions to encourage teachers' involvement in action research, which also increased the number of teacher-researchers. Firstly, based on the decision of the school director in 2016, every Saturday is appointed a day for teacher professional development. On this day the lessons start later than at their regular time giving the teachers an opportunity to attend one of the in-school courses arranged early in the morning by more experienced teachers of the school. Such teachers are those who were trained to conduct a particular course or the participants of valuable

seminars and trainings held abroad or within the country. In all cases, the main office located in Nur-Sultan (Astana) organizes these seminars and trainings. Secondly, the school administration encourages the teachers to take part in a variety of local, republican and international educational research conferences.

One of the in-school courses is dedicated to action research and conducted by experienced teachers, who are called moderators. The moderators are more experienced action researchers who have been to international conferences as participants and have several research publications. The courses are compiled for three groups of teachers, which are "beginner", "continuing" and "advanced". The teachers who are new to action research go to the "beginner" group, while those who have one or two years of experience are recommended to attend the courses of the "continuing" group. The teachers, who are confident about their action research practice and believe they already know a lot of things regarding it, are preferred to go to the "advanced" group. The teachers make their own decision about which group to join.

Some school teachers have become active participants of various regional and international conferences held within the country and abroad. They also have their research results published in different Kazakhstani and international educational journals and periodicals.

In addition, the school annually holds the regional scientific and practical conference, which takes place either in April or May. In 2018, the second regional conference was held with the participation of the teachers from the specialized and regular schools of the region. The teachers presented their action research findings and shared their experience with each other.

Despite worthwhile activities existing in school regarding action research and the knowledge about the benefits of action research for improving teaching practice of both

experienced and novice teachers, my personal observation reveals that there is no shared understanding of action research in the selected specialized school. Different teachers not only have different understandings, but also contradicting views about action research and how it should be done. Hence, the misunderstanding that exists about conducting action research sometimes leads to poor quality research. The teachers also face numerous challenges while doing action research but they keep quiet about it and this is likely to make the matter worse. The school did not establish a certain mechanism to evaluate and monitor the quality of action research studies done by teachers. Thus, I conducted this study to explore how the teachers at the selected school understand what action research is, how it should be conducted, what challenges do they face in carrying out their action research studies, and how those challenges can be addressed to help teachers conduct high quality action research studies.

Purpose of the Study

The purpose of this qualitative case study is to explore teachers' understanding of the notion and concept of action research; the way they conceptualize and implement action research as a way to improve their teaching practice; and to identify the challenges they face in conducting action research in their school. Participants of this study are the teachers practicing action research for more than two years and the moderators of the school-based action research courses. The site is one of the specialized schools in the western part of Kazakhstan.

Research Questions

The research was guided by the following four questions:

1. What do teachers understand by action research?

2. How do they design and implement action research?

3. What challenges do they face in conducting action research? Why do these challenges occur?

4. How do the teachers address those challenges?

Significance of the Study

The research topic is pertinent to the current reforms taking place in the educational system of Kazakhstan, as action research was introduced into specialised and some regular schools together with the new updated educational programme. Madeyeeva, Nassygazy and Saltybayeva (2016) conducted a research on the topic "Advantages and Difficulties of the Projects Action Research and Lesson Study", in which they investigated the main aspects of the success and major barriers to the implementation of action research and lesson study projects in 20 specialized schools. The researchers identified three benefits of action research: professional development and the enhancement of teachers' research skills, expansion of collaborative environment and dissemination of the best practices, and the positive impact of the research on the students' progress. According to the researchers, schoolteachers have low research skills and do not receive sufficient support in their research. In order to eliminate these hindrances, Madeyeeva et al. (2016) suggest that teachers should be provided with "methodical hours" for professional self-development, and access to international periodicals and e-resources database. The latter causes difficulty, as all the international articles and resources are mainly written in English, the language the majority of the teachers do not possess. This research is the study conducted on 20 specialized schools, however there is no research regarding the situation in each school.

First of all, the findings of the study will help the school leadership know the different, at times contradicting, views held by teachers about action research. They will understand where such views come from, and how they can be addressed to develop a

shared understanding about, and approach to action research. Secondly, the study explores the challenges and difficulties faced by teachers and suggests ways to address them. The research practitioners will also be better aware of conducting action research, handling research methods, collecting data and analyzing them. The teachers from both selected and regular schools can utilize the information from the study for better acquisition of knowledge about action research. It will also expand the comprehension of the specialized schoolteachers about how to incorporate action research into their teaching practice so that it will serve them as a tool for professional development.

The policymakers will be able to get acquainted with the challenges encountered by teachers involved in action research, and use the research results to take steps to alleviate those challenges.

Level course trainers as well as in-school action research course moderators may also use the results of this study in order to assist their trainees with conducting action research in the proper way in their schools.

The study can contribute to literature on action research, especially in the context of Kazakhstan.

Structure of the Thesis

The thesis consists of six chapters. Chapter 1 presents information about why and how action research was introduced into teachers' practice, statement of the problem, purpose of the study, research questions, significance of the research and the structure of the thesis. Chapter 2 demonstrates a review of the literature and research studies about the definitions and benefits of action research, the ways teachers view and implement action research, what challenges they encounter and the strategies applied by teachers in order to overcome those challenges. Chapter 3 describes the research design, study area, participants, data collection and data analysis procedures, and ethical considerations.

Chapter 4 presents the findings of the study collected from the interview responses, observations of the in-school action research courses, and reviews of action research course plans, reports and articles. Chapter 5 discusses the findings in light of both empirical data and insights from relevant literature. Chapter 6 makes the conclusion of the study, outlining further implications of the study, limitations and suggestions for future research.

Summary

This chapter provided an introduction to the thesis focusing on the statement of the problem, purpose and significance of the study, research questions and structure of the thesis. The researched topic is of immense importance, because even though schoolteachers are encouraged to take up action research, they face a number of challenges due to lack of appropriate support. The outcomes of the research will reveal the root of the challenges, and offer the ways of alleviating those challenges.

Chapter 2: Literature Review

In this chapter I discuss the reviewed literature relevant to my study. Most of the reviewed studies were taken from international sources. Also, books on action research were approached in order to describe the action research process. The chapter is divided into five sections. The first section considers the definitions of the concept of action research and the reasons why the teachers should participate in action research. The second section provides a detailed explanation of the action research stages, while the third section presents how the schoolteachers view and what they understand by action research. The fourth section mentions about the challenges teachers face when conducting action research, and how those challenges are coped with. The fifth section talks about implementation of action research in the context of Kazakhstan. The chapter ends with the theoretical framework guiding this study and a summary of this chapter.

Action Research: Its Definitions and Aims

Kurt Lewin was the first to introduce action research model into social science disciplines. He wrote about it in his article called "Action Research and Minority Problems", which was initially published in 1946. According to the originator, the key characteristics of action research are "a cyclical process of planning, action, and evaluation" (p. 8), ongoing feedback to all the concerned individuals, collaboration between stakeholders, tackling a problem and developing new knowledge (Bargal, Gold, & Lewin, 1992). In his article, Lewin (1946) defines action research as "a comparative research on the conditions and effects of various forms of social action, and research leading to social action" (p. 35). Lewin believed that research should not be something that produces only books.

Today, action research has gained a special popularity in education "as a way to improve practice" (Glesne, 2011, p. 23). It has become common in literatures and research

association meetings concerning education (McNiff, 2013). Action research has an impact in other fields as well, such as organisation development, anthropology, economics, psychology, sociology and management (Brydon-Miller, Greenwood, & Maguire, 2003). It is also widely used in "management education and organisation studies, social and health care work, and other professional contexts" (McNiff, 2010, p. 8).

Action research is a systematic process which contributes to professional growth of teachers through cultivating new knowledge and building up reflection skills, also allowing them to become owners of effective teaching practices and impact student performance (Hine, 2013). McNiff (2010) claims that being engaged in action research supports the professional development as teachers learn and develop their knowledge by "learning to do things in new ways" (p. 22). Rönnerman (2013) also adds by defining action research as "one way to attain professionalism" (p. 9).

Action research is a qualitative research method, which deals with a problematic situation by implementing change and reflection, and comprising theory and practice. During action research, researchers and practitioners work in collaboration to fulfil a cycle of activities incorporating the diagnosis of the problem, intervention of the action as well as learning through reflective practice (Avison, Lau, Myers, & Nielsen, 1999). Bradbury-Huang (2010) considers that action research has characteristics of qualitative research with one notable peculiarity, which is dealing with practitioners. Though qualitative research engages practice, it is not performed by practitioners (Bradbury-Huang, 2010). Creswell (2012) describes action research design as "the most applied, practical design" (p. 576). In his book, Creswell (2012) defines that "action researchers use a process of inquiry" and "the teacher or educator becomes the researcher" (p. 592). The inquiry is developed when others collaborate and become coparticipants in the action research process (Creswell, 2012). Cain (2011) states that educational action research has gained a considerable

interest, therefore it can attract teachers into research and refute a common belief that research is something that is beyond teachers' practice.

The main motive of action research is to help research practitioners to find solutions to the issues and challenges "in a reflective way" (Altrichter, Posch, Somekh, & Feldman, 2005, p. 4). By reflecting, the researchers provide explanation to the data and then share them with their colleagues. This is called the reflection phase. Afterwards, it is followed by the action phase consisting of planning, implementation and evaluation (Glesne, 2011). Vogrinc and Zuljan (2009) can add at this point by notifying that action research in education is performed by teachers, who are concerned about the problems occuring in their teaching practice and have an intimate commitment to overcoming and reflecting on those problems.

Altrichter et al. (2005) noted that fifty years of experience with action research has revealed its potential to lead the professionals to obtain outstanding outcomes in case they are supplied with favorable circumstances and assistance. By being involved in action research, teachers do not only make a contribution to the school development, but they also widen their professional knowledge and skills. Moreover, they can make a significant input into "the knowledge base of their profession" (Altrichter et al., 2005, p. 4).

In the article written in 2013, Hine tells about the course called "Action Research in Education" and taught to the students of Master of Education at one of universities in Australia. The course lasts one semester (almost six months). By the end of the course, students will be able to complete their action research papers based on four interconnected assignments. The course attracts professionals from a variety of educational settings, from early childhood to administration and tertiary education (Hine, 2013). Thus, the author suggests that action research should become an integral part of the teacher education

programs, since it continuously reinforces and enhances practice in the classrooms, schools and communities.

Taking into account the fact that the OECD (2014) report offers the teachers of the country to develop better teaching aids and resources and manage them with creativity in order to reach the binary goal of encouraging students to obtain higher-order thinking skills and meeting the needs of those who have difficulty with learning with the present-day textbooks and teaching approaches, action research seems to be beneficial on the way to achieve this recommendation. Moreover, many other existing issues within the classroom and inside the school can be tackled with the help of teacher action research.

The Action Research Process

Sagor (2000) identifies seven steps of action research. These steps form a cycle, which is consistently used by researchers. The steps encompass the following: selecting a focus, clarifying theories, identifying research questions, collecting data, analyzing data, reporting results and taking informed action. A.P. Johnson (2012) describes action research as a repetitive process, which consists of identification of the problem, review of literature, planning collecting data, collecting data and analyzing it, planning actions, evaluating findings and sharing them. Pelton (2010) suggests five stages, such as identifying the issue, collecting data, planning action, activating the plan and assessing the outcome.

According to Sagor (2000), first comes identification of the problem, the step, which is considered to be of paramount importance. At this stage the researchers identify the topic that they want to explore. During the second stage, the researchers determine the approaches, beliefs or strategies that they think will work best to respond to the researched focus. Afterwards, the research questions need to be designed to direct the study. The fourth step, which is data collection, may seem pressuring in terms of time and expertise to generate instruments for collecting data that stand out by their validity and reliability.

However, action research gives an immense opportunity to gather information within the classroom. Tests, discussions between students and questionnaires are a great source of data if handled efficiently and purposefully. Next comes the fifth step, which addresses data analysis. Sagor (2000) suggests that the researchers should seek answers to the two specific questions, which are "What is the story told by these data? Why did the story play itself out this way?" (p. 6).

The most rewarding step is the moment when action researchers are ready to report their results. They mainly do this at the meetings, seminars and conferences. There are teachers who take an advantage of their research results to make their works published and used for covering their assignments for graduate programs. When compiling a lesson plan or an academic program, the teachers undertake action planning, the last step in the action research process. This is the period when teachers search for the ways of avoiding their previous faults and becoming more self-assured in their actions (Sagor, 2000).

Identification of the problem. Altrichter, Posch, Somekh, and Feldman (2005) identified three categories of people involved in action research. The first category consists of teachers who have an urgent issue to address, while the second category of them struggle with determining a starting point due to abundance of questions in mind. Lastly, the teachers of the third category do not possess any ideas from which to start their research.

The suggestions given by different researchers about choosing a starting point are applicable to the teachers of above mentioned three categories. In his book, Sagor (2000) proposed to keep a teaching journal, specifying it as an effective strategy to find a focus for research and a great tool for immediate recording of what happened in the classroom. Teachers record what was specifically interesting and impressive, as well as discouraging and disappointing. Thus, teachers will have plenty of notes depicting their impressions,

concerns and anxiety. After some time teachers discuss what is written in their journal with their trusted colleague or friend to identify the theme for research. They may write the themes on the chart paper and maintain questioning until they clarify what problem each theme implies. In this way, teachers are able to find a focus for both individual and team research.

Sagor (2000) writes about another compelling strategy that aids with selecting the focus for researching. It is called the reflective interview. For the implementation of this strategy, the teacher needs to find an interview partner. This can be any teacher, who can listen well and discuss the topics. The discussed topics can be general and specific. According to the rules of the reflective interview, the interviewer is the person who needs to ask clarifying questions in order to help the interviewee look at the issue from different angles, while the interviewee responds to the questions and talks most of the time. The reflective interview lasts only 20 minutes. After 20 minutes pass, the participants of the interview shift roles. When the interview finishes, the researcher needs to reflect on it, trying to find out whether the discussed issue is worth the time spent on it. If the researcher sees value in the topic, then it means he or she found a focus for investigation, otherwise, the process of the reflective interview is repeated.

Literature review. Ary, Jacobs, Irvine, and Walker (2014) noted that reviewing the literature helps action researchers identify and formulate their research question. Literature review in action research is quite limited compared to other research studies. However, it is helpful for researchers to evaluate what the previous studies have found out concerning the research topic. There is a wide range of sources that can be examined: professional and practice literature, institutional and informal reports as well as media materials. Hendricks (2009) suggests that researchers should take into account the relevance of the reviewed literature to the research topic, its credibility and similiarity.

Data collection. While discussing data collection for action research, in their book Ary et al. (2014) claimed that different research approaches are demanded for different research questions, therefore action researchers can take advantages of both quantative and qualitative research methods. A researcher has to utilize multiple data sources to secure the reliabilty and validity of the data found. The technique of triangulation allows to integrate two or more methods of data collection. When multiple sources result in the same outcomes, the most dependable information is presented. Pelton (2010) pointed out the following typical classroom data:

> student work samples, quizzes, homework, running records, checklists, benchmark tests, standardized test results, a question-and-answer session, the results of an every pupil response, the monitoring of student on-task behaviors, attendance records and children's profiles, and general observations of student learning. (p. 11)

All the above provided sources help collect a variety of data, which ensures multiple perspectives on the research topic and more accurate planning that promotes modification or improvement of teaching practices (Pelton, 2010).

Action planning. While creating an action plan, Pelton (2010) highlights the importance of reflecting on the investigated problem by utilizing all the resources available to action researchers. This is the stage when the culture of collaboration plays its role. Depending on the root of the problem, the researchers may refer to the assistance of more proficient teachers, school specialists and local college or university professors. Pelton (2010) suggests that researchers can "learn from their examples and borrow from their conventional knowledge" (p. 12). However, the researchers need to beware not to copy them, but to design their own action plan and elaborate their own best practices. The reviewed literature (one of the action research steps described above) will also make its contribution to the development of the efficient action plan (Pelton, 2010).

Ary et al. (2014) also focus a special attention on action plan and describes its function in the following way:

The action plan sets priorities for projected actions in order of importance; sets goals for the actions required; lists objectives required to accomplish the goals; stipulates the sequence of tasks; specifies who will carry out tasks; identifies who must be informed or consulted for permission; determines the time frame for task completion; and calculates materials, equipment and funds required to complete the task. (p. 571)

Data interpretation and outcome assessment. Data interpretation makes "the experiences being studied understandable" and "focuses on the implications or meanings that emerge from the analysis" (Ary et al., 2014, p. 568). They also noted that in order to make the clear picture of the situation, the researchers ask the interpretive question "Why?". In addition, visual aids, such as concept mapping and problem analysis, can be used due to their benefits. Concept mapping arranges the components of the situation diagrammatically in relation to the investigated problem, whilst problem analysis helps to visualize the causes and consequences of the existing problem (Ary et al., 2014).

After all the planned actions were accomplished, the researchers need to reflect upon the outcomes of them. At that time the researcher possesses two types of data, i.e. the initial data derived before the actions were taken, and the new data obtained as a result of actions (Pelton, 2010). What Pelton (2010) offers here is to analyze specifically the data that will help to identify the impact of the taken actions on the children. The impact can be "a cognitive improvement, an affective change, or even a physical or psychomotor improvement" (p. 13). The data will help with distinguishing between what worked and what did not work in the classroom allowing the researcher to ponder their learning from instructional strategies and decide whether they will continue what they are doing, change

or terminate it. The conclusions and inferences are made based on the data as well (Pelton, 2010). This view is supported by Ary et al. (2014) who write that data must support claims that were made on account of interpretation.

Ary et al. (2014) pointed out the connection of the stage of data interpretation with the process of ongoing reflection. They describe reflection as "the most challenging aspect of action research" (p. 570) and view it as reviewing data that is continuously done throughout research. Planning the next steps in terms of actions is also achieved with the help of consistent reflective practices (Ary et al., 2014).

In their article, Carboni, Wynn and McGuire (2007) suggest that the researchers should reflect on their learning and new practical knowledge (the expertise and skills) they have developed as a result of their experiences. Upon developing new knowledge, the action researchers share their research findings with their colleagues. Sharing makes action research projects richer and more meaningful. Ary et al. (2014) list other forms of disseminating research results, such as written report, oral presentation, interactive sessions, video and electronic media, artistic and dramatic performances. Written reports are usually shorter than other reports. However, Ary et al. (2014) state they need to include the following:

> An area of focus statement or purpose statement, a summary of related literature
> (usually very limited), the research questions, a description of any intervention or
> innovation, a description of data-collection strategies used, data analysis and
> interpretation, and the action plan, as well as reporting the results obtained after
> implementing the action plan. (p. 572)

In addition, there is a variety of action research and mainstream journals that may accept the written reports for publication in case they meet the criteria for assessing action research reports (Ary et al., 2014).

Teachers' Understanding of Action Research

In her article, Noffke (1992) claims that "there has been very little examination of the diversity of visions within action research" (p. 15) specifically with the teachers. The existing studies provide diversified viewpoints on teachers' perceptions about action research. While some studies recognize action research as a way of cultivating and disseminating knowledge about teaching, others view it as a process of empowering educational decision-making and responsibilty. There are also studies that determine action research as personal fulfilment in one's work (Noffke, 1992).

A remarkable change in the teachers' perception about classroom research was spotted in the study by Christenson et al. (2002). Before being introduced to action research, the teachers envisioned it as traditional research, where they would test hypotheses and proven facts. After attending the course on action research, teachers' understanding about research changed, and they started to view action research as "explicitly interpretive and emergent with a focus on the nature of learning and reflection" (p. 267). In addition, the teachers understood the importance of collaboration with colleagues when participating in action research. Teachers stated that their research would not be performed without a support group. Many teachers acknowledged that they enhanced their professional growth, began to change for the better, felt valued as a teacher, started to understand the children better by hearing their voices and became good observers of academic and social situations in the learning process (Christenson et al., 2002).

As a result of her research involving nine elementary teachers, Sardo-Brown (1992) identified a number of benefits the teachers experience when they are engaged in action research. The teachers see action research as a key tool that improves instruction and that helps avoid trials and errors in the teaching process. The teachers, who took part in the study by Morales et al. (2016) agreed that the enhancement of teaching and learning is

achieved by action research. In addition, in their responses some teachers admitted that they witness positive changes in delivering instruction, and handling classroom and student related problems.

Mertler (2009) pinpointed five potential benefits of action research for teachers. First of all, action research helps teachers to deal with their own problems. The second benefit is that action research can start and be done at any time, and produces outcomes rapidly. Thirdly, thanks to action research, the researchers better comprehend and enhance their professional practices. In addition, action research establishes strong professional relationships among colleagues. Eventually, action research "provides alternative ways of viewing and approaching educational questions and problems and with new ways of examining your own educational practices" (p. 19).

Levin and Rock (2003) conducted a study on five pairs of preservice and experienced teachers (i.e. mentees and mentors) who undertook collaborative action research. As a result, they identified learning outcomes both for preservice teachers and their mentors, and noticed the impact of collaborative action research on the mentor and mentee relationship. To begin with, collaborative action research helped preservice teachers understand the images of themselves as teachers, as well as their roles and responsibilities. Furthermore, by being engaged in collaborative action research, preservice teachers developed their self-confidence, started to realize the importance of research and reflective practice. They began to see professional growth and development as their personal responsibility. In the meantime, experienced teachers admitted that they became better aware of their mentees' needs, abilities, progress and achievement. The majority of these teachers felt improvement not only in their instruction, but also in the feedback they give and strategies they use for motivation of young teachers. Likewise their mentees, some of the experienced teachers strengthened their image as teachers, too.

Eventually, four out of five pairs reported about the positive influence of collaborative action research on the relationship between the mentor and mentee, supplying them with an opportunity to learn more from each other's professional beliefs and practices, which are considered groundwork for an effective mentor-mentee relationship between teachers (Levin & Rock, 2003).

Within the Kazakhstani context, there is a research done by McLaughlin et al. (2014), in which they identified a number of benefits of action research reported by Kazakhstani schoolteachers after it had been implemented in seven specialized schools throughout the country. Developing collaboration was seen as one of the most beneficial aspects of action research. Despite having been influenced by power hierarchies of age and position for many years, the teachers started to share their experience and give advice to each other. The gap between the teachers and vice-principals began to reduce, imposing changes into the school culture and making the staff close-knit. Moreover, teachers have become learners themselves by developing their practice. Their responses demonstrated that they see action research as a "vehicle for reflection and learning" (McLaughlin et al., 2014, p. 259).

Challenges Teachers Encounter While Conducting Action Research and the Ways of Coping with Them

The problems teachers confront while participating in action research have been revealed by many researchers.

The most common obstacle identified in the majority of the research articles concerns lack of time (Christenson et al., 2002; Dame, 2011; Gilbert & Smith, 2012; C.S. Johnson, 2011; Wang & Zhang, 2014). The teachers, who participated in Wang and Zhang's study (2014), reported about possessing a considerable amount of work concerning their teaching as well as beyond their teaching, which hindered their successful

action research projects. Only due to assistance from the university researchers and consistent 'push', the teachers were able to finish their project. The participants of the study by Gilbert and Smith (2012) mainly struggled with finding time to review and analyze data, to reflect and write a report. The teachers in the study by Christenson et al. (2002) suggested that they should abolish some other their responsibilities in order to find time to do research. The teachers believe that their involvement in research would be more beneficial to student learning than spending time on grading students' paper, which would later be thrown into the trash.

An interesting finding was accounted by Gilbert and Smith (2012), whose research participants found difficulty with taking field notes as a factor that induced "lack of skill using data collection tools" (p. 81-82). All the teachers in their study experienced a difficulty with taking filed notes during active teaching. There were concerns about taking field notes in the correct way, and "managing the note-taking process while teaching or helping children" (p. 82). The difficulties were resolved by getting acquainted with some examples of field notes, using a clipboard and "sticky notes" to collect data (Gilbert & Smith, 2012).

According to Hine (2013), students at the university also experience a number of difficulties that inhibit their successful completion of the "Action Research in Education" course. Students frequently do not have a precise focus for the project, as well as do not manage their time competently. Furthermore, they often assume they know the solution to the problems in advance. Hine (2013) also mentioned that university lecturers assist their students to overcome these difficulties. They teach students to "narrow down the focus of their project" (p. 160), encourage them to become organized by following the timeline they design themselves indicating all the significant dates. In addition, the lecturers take some time to painstakingly explain to the students that the process of action research should be

far away from drawing immediate conclusions and demands planning, researching, analysing data and taking actions.

In his research built on identifying the problems teachers encounter while doing action research, Zhou (2012) studied three cases, which helped him sort out the issues that require attention and solution. The first problem is that teachers get the wrong idea about research and show mistrust to university researchers. In other words, teachers do not take any actions, collect or analyze data, their research does not have any alignment with their teaching practice. They just end up with writing "papers" and submitting them to the head of scientific research without understanding the essence of action research and its relation to teaching. In addition, teachers at school have been research targets for many times already that they have developed a sceptical attitude towards university researchers. Secondly, teachers are so busy with a wide range of responsibilties apart from the teaching process that they witness time deficiency. Furthermore, although schools purchase resources for the library, the library database does not consist of academic books, scientific journals or periodicals. These difficulties lead to such problems as "lack of time and adequate library resources" (p. 73).

One more hurdle is caused by teachers' poor knowledge of research methodology and theoretical guidance. Even though teachers have some theoretical knowledge about research methods, they do not know how to apply them in practice. In their responses, teachers mention about the need of the theory they can utilize in the course of their teaching experience (Zhou, 2012). Almost the similar issue was raised by Wang and Zhang (2014), where the teachers had a limited knowledge of research methods, and they spent a great deal of time on handling them.

The last issue raised by Zhou (2012) is that teachers involved in action research may rapidly renounce it due to a wide range of activities they are required to carry out,

therefore lose their interest and eagerness in doing research. When teachers witness apathy from their students' side or obtain poor research outcomes, they simply cease action research.

Abdi (2011) found out several barriers to action research, including huge teaching and administrative workload, insufficient support and shortage of commitment to research, poor knowledge about action research, lack of resources and incentives provided to teacher researchers.

Memorial University in Newfoundland and Labrador Canada (as cited in C.S. Johnson, 2011) discovered the five common challenges that teachers encounter during their action research practice. They are time constraint, lack of resources, difficulty with formulating a research question, resistance to change and failure to take ethical considerations into account.

A remarkable way of learning about the execution of action research was presented by Vogrinc and Zuljan (2009). The researchers reported that "the reader can transfer the results of the action research to their educational practice by taking that which makes sense and acting according to it or by adapting the findings to the characteristics of their own specific situation" (p. 55). Thus, Vogrinc and Zuljan (2009) specified the value of describing the action research process with the explicit explanation of the problem, the ways of solving it and the results achieved. In case teachers are provided with "the description and analysis of the course of the action research" (p. 55), the readers will be able to implement or accommodate the action research results in their own teaching practice or in their peculiar case. This process substantially contributes to the teachers' professional growth.

The Implementation of Action Research in Kazakhstani Schools

The action research programme was launched in some specialized schools in Kazakhstan starting with the year 2013. Some regional workshops and cohort meetings were organized for the teachers from specialized schools. The culmination of this year was a whole cohort meeting and presentation at an international conference. A Teacher Research Coordinator (TRC) was assigned in every specialized school to facilitate the spread and development of the action research programme among the teachers (McLaughlin et al., 2014).

Madeyeva et al. (2016) reported that 255 teachers from specialized schools participated in three seminars conducted at the University of Cambridge, UK, and 11 seminars held within Kazakhstan. Also, about 600 teachers took cascade training and are involved in more than 250 research projects (both action research and lesson study). The Handbook and Manual of Action Research was compiled to assist TRC. The collection of 79 posters of teacher researchers was made, and a special community of researchers was created on the website called "Pedagogical Database", through which teachers have a good opportunity to share their research results and get support from colleagues. The teacher researchers from any school can take part in the annual conference organised by AEO "Nazarbayev Intellectual Schools", where there is a separate section for presenting research results.

Based on their research findings, Madeyeva et al. (2016) identified a number of barriers that hinder teachers from conducting a good quality action research. The first one is low research skills that involve difficulties in managing research methods, identifying the research question, lack of theoretical knowledge and analysing the results of the research. The second one is the provision of insufficient support in conducting action research. In order to handle the existing situation, Madeyeva et al. (2016) offered some recommendations such as providing teachers with methodical hours, raising the

competence of TRCs, enhancing teachers' research capacity and providing access to international periodicals and electronic resources database.

Despite a wide range of activities taken to support action research in some Kazakhstani schools, there is no information about the successes and challenges of action research in each specialized school due to lack of research in the given area.

Theoretical Framework

'Learning to learn' is one of the key competencies possessed by individuals, through which they arrange their own learning, manage their time and information efficiently. Learning takes place not only individually, but also in groups (Rogers, as cited in Sahin, Akbasli, & Yelken, 2010). Lifelong learners feel responsibility for their own knowledge, personal development as well as teaching (Sahin, Akbasli, & Yelken, 2010). Professional development and knowledge are gained with the help of reflection (Mortari, 2012). Action research is seen as the efficient mechanism that fosters teachers' professional development through reflective practice and collaboration. Thus, the theories of lifelong learning and reflective practice (Schon, 1983) provide a framework for teachers and practitioners to continue to learn and develop their professional capacity by actively engaging in systematic examination and analysis of their own as well as others' practices through action research.

Summary

The purpose of this chapter was to provide findings from different studies about what action research is, how teachers view and understand action research, what stages action research is comprised of, the challenges teachers face when they are involved in action research, and what steps teachers take to cope with those challenges. The last section provided information about how action research entered Kazakhstani teachers' teaching practices.

Chapter 3: Methodology

My study is guided by the following research questions: What do teachers understand by action research? How do they design and implement action research? What challenges do they face in conducting action research? Why do these challenges occur? How do these teachers address those challenges? The qualitative case study design is applied to find answers to these research questions. This chapter describes the research methodology, and presents information about research design, description of the study area, participants, procedures, data collection methods, data analysis and ethical issues.

Research Design

This study adopted a qualitative case study approach. Case study is one of the famous research designs widely used in different fields such as psychology, sociology, anthropology, business, education and many others (Yin, 2015). A combination of different data collection methods is used in case study research, which provides both qualitative and quantitative outcomes (Eisenhardt, 1989).

In his book on case study research method, Yin (2015) distinguishes case study from other research methods by highlighting such characteristics as asking "how" or "why" research questions about a present-day series of events, and little or complete absence of control over the events by the researcher. This research falls under these criteria. Firstly, one of the main research questions looks into how schoolteachers design and implement action research, while there is the second one that deals with how teachers address the challenges they face. There is also a research question, which looks into why those challenges occur. Secondly, the research explores the present-day situation. Thirdly, the researcher has never participated in action research courses held in the specialized school and has never been involved in the organisation of the action research courses in the given school.

According to Gillham (2000), a case can be an individual, a group, an institution or a community. The case of one specialized school was examined in this research study. A variety of evidence is collected when studying the case. It is "the evidence which is there in the case setting, and which has to be abstracted and collated to get the best possible answers to the research questions" (Gillham, 2000, p. 1). The evidence for my case study research was accumulated within the school to gather information about how teachers understand the concept of action research, the way they design and implement action research practices, the challenges they face and the actions they take to overcome those challenges. In order to arrive at the best answers to the research questions, the data amassed from the semi-structured interviews, course session observations and reviews of the action research articles were synthesized, compared and contrasted.

Description of the Study Area

The research was carried out in one of the specialized schools, which is located in the western part of Kazakhstan. This school is the pioneer in introducing action research among all the other schools in the region. This means the specialized school takes responsibility to transfer all the knowledge about action research to the other mainstream schools in the region, which comprise schools located both in the urban and rural areas. In order to disseminate their experience among the teachers from the mainstream schools, selected research practitioners of the specialized school conduct scheduled seminars and trainings for them. When the specialized school is aware of their own successes and challenges in promoting and conducting action research, they can guarantee that they deliver their experiences and practices in action research to other schools in the proper way. My main purpose of selecting this particular school is to help the school administration and the teachers to identify the areas regarding action research practices that need urgent attention and further improvement. Another reason why I chose this school is

that currently I work there, and this made it convenient for me to gather information and conduct my study in this specific school.

Sampling Selection

Marshall (1996) points out that "an appropriate sample size for a qualitative study is one that adequately answers the research question" (p. 523). Coyne (1997) expounds on the importance of the selection of sample in qualitative research, because the quality of the research greatly depends on it. Being aware of the importance of selecting the participants for getting credible answers to the interview questions, I paid a great deal of attention to the number of the participants and their experience in the field of action research. For this case study, purposeful sampling technique was employed. The reason for using this particular sampling technique was that it is frequently applied in qualitative studies, and it represents a sample that retains the typical features consistent with the research question(s) (Nastasi, 1998). Also, in purposeful sampling, the participants are chosen with the researcher's intention of learning or understanding "the central phenomenon" (Creswell, 2012, p. 206). In order to recruit the appropriate participants who can contribute to the study by providing detailed and extensive information, the specific criteria for selecting participants were created. These included the current involvement in action research, more than two years of experience in conducting action research, as well as active or continuous participation in school-based action research courses for at least two years.

Palinkas et al. (2015) specify fifteen types of purposeful sampling strategies, where maximum variation sampling is described as one of those placing "emphasis on variation" (p. 535) and exploring "common patterns across great variation" (Glesne, 2011, p. 45). So, maximum variation sampling was applied for the study to ensure the diversity of the participants and look at the research problem from different viewpoints. Thus, the

participants had to be the representatives of both genders and different age groups, with

more than two years of experience in action research, and the members of different subject

departments. One teacher from History, Kazakh Language, Mathematics, Arts, English

Language, Biology and Physics departments participated in the study. Originally, it was

planned that four female and three male teachers would be invited to take part in the

research. During the research it was found out that most of the male teachers were not

engaged in action research, and some did not have two years of experience in doing action

research. As a result, five female and two male teachers participated in the research. Their

ages ranged between 28 and 51 years.

As mentioned in the first chapter, the school runs the action research course

sessions for all the teachers, who are interested. The course moderators were also invited to

participate in my research study. At the time there were nine action research course

moderators at the specialized school, who are accountable for "beginner", "continuing"

and "advanced" courses for action researchers. One course moderator from each group was

invited to take part in the research. There were no specific criteria for selecting the course

moderators, as all of them are considered more experienced action research practitioners in

the school. All the course moderators are females, and their ages ranged between 36 and 55

years.

Creswell (2012) specifies that the qualitative researchers choose the participants

"that can best help understand the central phenomenon" (p. 206). The reason for choosing

two groups of participants (teachers and course moderators) is to profoundly explore and

broadly interpret teachers' understanding of the notion and concept of action research, the

way they implement action research into their teaching practice, the challenges they face

and the actions they perform to respond to the challenges.

To sum up, 10 participants from the same school were engaged in the study, 5 female and 2 male teachers, representing different age groups, and 3 course moderators were interviewed through semi-structured face-to-face interviews with open-ended questions. These teachers' group meetings and course sessions conducted by moderators were also planned to be under observation during the study. Table 1 presents details about the participants:

Table 1: *List of participants*

Pseudonym	Experience in Action Research	Subject	Gender	Age	Role
Gulzhan	3 years	History	Female	40	Teacher researcher
Zhadyra	2 years	Art	Female	28	Teacher researcher
Aizhan	3 years	Biology	Female	38	Teacher researcher
Arai	2 years	Mathematics	Female	39	Teacher researcher
Balausa	2 years	English	Female	31	Teacher researcher
Asan	2 years	ICT	Male	51	Teacher researcher
Bek	2 years	Physics	Male	38	Teacher researcher
Lala	3 years	Chemistry	Female	55	Course moderator
Shyryn	2 years	Russian	Female	44	Course moderator
Aisha	3 years	Kazakh	Female	36	Course moderator

Procedures

The first step before commencing the study was getting the approval from the NUGSE Ethics Review Committee. Once the approval was obtained, the first person whom I approached was the gatekeeper of the specialized school. The gatekeeper received an Invitation letter (see Appendix A), in which the researcher explained the purpose of the study and the benefits the school would gain from the research. When the gatekeeper gave

permission to conduct the study within the school, I got the list of the teacher-researchers who attended school-based action research courses in the previous two academic years and of those attending them the following year. It was not difficult to get the lists, as the school leadership regularly issues orders, in which they indicate the names of the participants of the courses and the moderators. Then, the orders are disseminated to the whole school staff via corporate mails. Eventually, I downloaded the lists of the course participants and their moderators in three academic years from my corporate mail.

When investigating the list of action researchers, I found out that most of them were females. At last two male researchers with two years of experience in action research were identified. The other five participants were females. All the participants were selected according to the criteria set and from different subject departments. The next step was to recruit them into the study. The Invitation letter (see Appendix A) stating the purpose and benefits of the study, what would be required from them during their involvement in this research, and assurance of their confidentiality and anonymity were given to them in a hard copy. All the participants responded in a few days affirming their agreement to participate on a voluntary basis, except one teacher, who claimed she was not confident enough to give an interview. Consequently, I chose another teacher from the lists, but from the same department. Then, I met all the participants individually to give an Informed Consent Form for Teachers (see Appendix B). The provided consent forms contained information about the purpose of the study, how data would be recorded and used, the ways of ensuring participants' confidentiality and anonymity, and the ways of eliminating the possible risks. The participants were aware of their right of withdrawing from research any time and without giving any reason. In each case, two consent forms were signed. One was given to the participant, while the researcher kept the second copy.

The participants were asked to respond to interview questions I had prepared in advance (see Appendix C). Also, some additional questions emerged during the interview. Each interview lasted between 45 and 60 minutes. The participants were interviewed individually. The interviews were conducted on Wednesdays and Saturdays, because the participants did not have any extra lessons on these days (Usually, all the teachers conduct extra lessons after the regular lessons end). The interviews took place in a locked room. The time of meeting for the interview was agreed beforehand to suit the schedule of the participant and interviewer. All in all, 10 semi-structured face-to-face and in-depth interviews were carried out, which helped to explore teachers' understanding of the notion and concept of action research, the stages they follow while doing action research, the challenges they face and they way they respond to those challenges. All the interviews were audio recorded. I promised to provide the participants with the copy of the research findings by the end of the study.

Data Collection

The process of data collection included semi-structured face-to-face interviews, teachers' group meeting and course session observations, and the reviews of action research reports and articles written by teachers.

Semi-structured interviews. Among all the data collection methods the semi-structured interviews were of greatest importance, because they provided me with valuable information. One unique advantage of this type of interviews is that there is a set of questions prepared in advance, and some other relevant questions can be asked when it is appropriate throughout the conversation. The questions were aimed at identifying what teachers understand by action research, and how they design and implement it as a way to improve their teaching practice at school (see Appendix C). The researcher also conversed with them about the challenges teachers experience whilst conducting action research as

well as the actions they take to overcome those challenges. During the interview participants were also asked about their own propositions on how to solve or at least alleviate the identified issues.

Seven teacher-researchers and three course moderators took part in the interviews. Each participant was interviewed once for about 45-60 minutes. Before the interview, the researcher and participants agreed on the convenient time and location communicating through corporate mails, WhatsApp messenger and telephone calls. All the interviews were conducted in Kazakh, and then translated into English by the researcher herself. With the consent of the participants, the interviews were audio recorded.

As Creswell (2012) noted in his book, interviews "do not restrict the views of the participants" (p. 205). There is one important thing I would like to mention in the support of his claim. During my study some interview participants had an extremely trustful attitude towards the researcher. There were the moments when after the interview had finished, they would come up to me on their own initiative and ask to include the information and opinions they had forgotten to mention during the interview.

Observation. As mentioned before, there are special courses for teachers who are involved in action research, which are conducted in school by more experienced research practitioners called moderators. Teachers attend these courses every week to discuss matters that bother them and simply share their experiences. With the permission of the course moderators, non-participant observation was made during the courses. The courses lasted for 40 minutes and observation took place the whole duration. The participants were informed about observation a week before. The researcher did not take part in the activities and discussion held within the course sessions.

The researcher was able to observe how course moderators interacted with the participants, the issues they discussed while meeting each other, and what knowledge the

teachers obtained at the courses. Observation allowed the researcher to identify benefits of

the course for teacher-researchers, as well as misunderstandings and obstacles that

prevented teachers to conceptualize the action research process. The data gathered from

observations were recorded in an Observation Protocol (see Appendix D) prepared well in

advance. There were two course observations all in all. All the observation notes were kept

in a locked drawer to ensure confidentiality.

The teachers of the school conduct action research individually, in pairs and in

groups. I planned to observe the two meetings of the teachers who are involved in pair and

group action research. However, during my study no meeting took place. According to the

teachers' action plans, they need to meet regularly, but practically it did not happen.

Document analysis. Before the study began, the researcher was quite certain that

the school would offer a lot of documents for analysis. This is explained by the fact that

the school has been functioning for more than three years already, and most of the teachers

have been doing action research during this period of time. Two regional conferences were

organized at school in the years 2017 and 2018, where teacher researchers presented their

research findings with the purpose of sharing experience with each other.

As a result of the regional conference, a special collection of articles based on

teacher action research is compiled and published every year. Twelve articles from these

collections were read and analyzed by me to ascertain whether teachers understand and

follow the stages of action research. I looked into whether planning was well designed, if

the methodology was used accurately, and how data was analyzed. In addition, I explored

the research purpose and questions, and looked into whether the research findings

presented answers to all the research questions.

In addition to the action research reports and articles, I read and examined the

course plans of school-based action research courses, which were developed by the

moderators themselves. I analyzed them to see what topics the courses offered the teachers, and whether all the action research stages were covered and explained to the course participants. The course plans were a valuable source of data, as they reflected the quality of the courses. In addition, reviewing the course plans allowed me to understand if the moderators were sufficiently prepared to ensure both theoretical and practical assistance to the teachers. All my records on the analysis of the articles and course plans were written in the document analysis sheet (see Appendix E).

Data Analysis

Hand analysis is quite beneficial as it allows the researcher "to be close to the data and have a hands-on feel for it" (Creswell, 2012, p. 240). For this research study, I used manual coding. In other words, the hand analysis of data was applied.

When I started analyzing the data, pre-coding was done in order not to lose the most efficient moments in the transcripts and documents (articles and course plans). As Saldana (2015) offers, the eye-catching words, phrases and sentences should be highlighted with a marker, and the notes of electronic format can be coloured. After transcribing all the interviews, I typed them on the computer and printed. On the printed versions of the interviews, I highlighted the necessary data in different colours. The teachers' understanding of the notion and concept of action research was highlighted with the "yellow" colour, while implementation of action research practices was "green", the colour for challenges was "red", and the ways of dealing with challenges were highlighted in "pink".

When analyzing the interview transcripts, I used lean coding. I read the paragraphs and sentences, and assigned codes. Then the similar codes were grouped and developed into broad themes. In my research study, four broad themes emerged in total. These themes were further broken down to sub-themes to keep the findings organized and systematized.

All the quotes from the participants that support the codes were underlined with the blue-coloured marker.

In order to synthesize what I have found, I wrote a memo (Saldana, 2015), in which all the information received from coding was summarized. Memoing is a very useful strategy for recording the codes and analyzing the data, and it allowed me to thoroughly reflect on the findings and make conclusions based on them.

To ensure that research findings were reported with accuracy and credibility in the written form, member-checking process was conducted. This means some of the participants were requested to read and check "whether the description is complete and realistic, …and if the interpretations are fair and representative" (Creswell, 2012, p. 259). Triangulation is present within this study, as responses of the interviewees were compared and contrasted with what was derived from observations and documents regarding action research in the school (i.e. research articles and reports). Furthermore, they were compared to what is stated in the works of academic experts about action research stages to find out whether the teachers adhere to all of them during their action research.

Ethical Issues

Before the study started, the researcher had approached the gatekeeper of the school with an Invitation letter. This letter was responded positively and permission was granted to conduct the study in the specialized school. The participants of the study received an Invitation letter through their corporate mails and in hard copies. Upon their consent to participate, they were given informed consent forms to read and sign. The consent forms informed them about possible risks and benefits of the study, as well as their rights to quit the research at any time, and refuse to reply to the interview questions they did not want to answer. In addition, they were aware of the facts that their participation was absolutely voluntary, and their names would remain confidential and anonymous, as the researchers

replaced the names with pseudonyms. They were notified about the purpose of the study, the approximate duration of the interviews, observation of group meetings and in-school course sessions. Member-checking was done before the data was analyzed in order to prevent any misunderstanding. The audiorecordings and transcripts were retained in the reseacrher's private laptop and protected with a password. All the observation and document analysis protocols were kept in the locked drawer in the researcher's classroom. Then, all the electronic and paper files were destroyed.

There were no known risks for the participants. The only little risk was that the teachers felt uncomfortable or little stressed while talking about the quality of the action research courses, their own understanding of action research and about the school leadership in facilitating action research. In this case, the participants could skip a question they did not want to answer. Also, they were assured that whatever they said in the interview would be completely confidential. In addition, participants could stop the interview or withdraw from the study at any time without giving any reasons. The expected benefits for participants were their better comprehension of the notion of action research, and implementation of action research as a way to improve their teaching practice. At the end of the research participant teachers will be provided with a short summary of the study and recommendation on how to take advantage of action research to improve their teaching practice.

Summary

The described chapter focused on the methodology of the research. In particular, the chapter described research design, choice of the research site, selection of the participants, the procedure used to recruit and involve them into the research study, data collection as well as data analysis processes. The last two chapters were devoted to the

limitations of the study and ethical considerations that were employed to protect

anonymity of the participants.

Chapter 4: Findings

This chapter presents the study's findings emerged from analysis of the semi-structured interviews, action research course session observations and review of AR course plans as well as reports and articles written by teacher researchers. The purpose of this study was to explore teachers' understanding of the notion of action research, and the way they implement it in their teaching practice. The study also explores the challenges teachers face in conducting action research, the root of those challenges and the strategies the teachers apply in order to address those challenges. The perspectives of two participant groups were examined during the research.

Apart from providing profound insight into the implementation of action research in this particular school, the choice of two groups of participants allowed the researcher to explore the influence of in-school courses on teachers' understanding about action research and their research practices. All the interviews were conducted in the Kazakh language, and participants' quotes were translated into English by the researcher herself. In addition, every participant was given a pseudonym to ensure that they would not be personally identifiable in any way.

The findings of this study capture the following major themes:
1) Teachers' understandings of action research,   2) Teachers' action research implementation practices,   3) Challenges teachers face,   4) The ways in which teachers address the challenges.

Teachers' Understandings of Action Research

The interview questions regarding the purpose of conducting action research revealed how the teachers understand it, and the reasons they are involved in action research.

Action research as a tool to tackle teaching and learning issues. After analysing the responses of the participants, it became obvious that most of them viewed action research as a tool to tackle the issues inside the classroom. For instance, Aizhan, a Biology teacher, who is considered an experienced research practitioner, defines action research as, "…teachers' research activities aimed at overcoming difficulties encountered in their teaching practice" (Int. 1/11/18). She also adds that the focus of the research can be various, including subjects concerning teaching, assessment, relationship with the students, even students' abilities and perception peculiarities.

A similar idea is shared by Mathematics teacher, Arai, who views, "…action research as the implementation of the teacher's selected teaching methods and strategies during the classroom problem solving process" (Int. 10/11/18). The same opinions were reiterated by three other researchers. Zhadyra, an Art teacher, said that "…action research is used by teachers to solve the certain problem in any grade" (Int. 7/11/18), while an ICT teacher Asan explains his main purpose in doing action research in the following way: "…to deal with the problem you face in your teaching practice. It means a problem emerges, and you seek the ways of resolving it" (Int. 6/12/18). The third supporter of the analogous view, Gulzhan, interprets her opinion by saying:

> The teachers need to do action research when there is a problem inside the classroom concerning not only the students, but also the teacher. Teachers often experience problems such as poor contact with the audience and teacher's incomprehensible explanation of the new topic. In these cases, action research is a necessity (Int. 6/11/18).

All the responses above demonstrate that teachers' main goal in conducting action research is closely associated with their intention to deal with the problems occuring during the teaching and learning processes. Shyryn, the course moderator, holds the same

view as she states: "…to raise the quality of their teaching. Nowadays, the majority of the teachers are well-educated, and they want to research their individual practices. They start by attending the school-based courses, and then 'get a taste' in doing research" (Int. 14/11/18). Shyryn's response is in line with most of the teachers' views. This serves as evidence that both course moderators and teacher researchers consider action research as an effective means to solve everyday problems in classrooms.

Action research as a collaborative practice. Almost all the participants of the study understand that the involvement of other people is crucial when resolving the problem through action research. An English teacher Balausa emphasizes the importance of student participation in dealing with the problem: "The student plays the main role in research. The problem can be solved only when a student and a teacher collaborate" (Balausa, Int. 8/11/18). The importance of student participation was also mentioned by Asan, an ICT teacher researcher. He states that "…the solutions to the problems should not be sought by one person. They can be discussed with the colleagues and the students" (Int. 6/12/18).

In addition, there are teachers, who prefer to conduct action research with their mentees (novice teachers, who have just started their teaching career) due to a number of benefits for them. According to History teacher Gulzhan's opinion, "While their engagement in action research, young teachers experience professional improvement. They develop their teaching practices. Moreover, they become better aware of the subject they teach, and therefore learn to teach the new lesson better" (Int. 6/11/18).

This view was seconded by another participant:

When I chose my critical friends, my choice fell on young teachers. I selected two of them, but they served mainly as observers rather than critical friends. I remember when I was an inexperienced teacher myself, I used to observe more experienced

teachers' lessons in order to learn teaching methods from them. While being involved in action research, young teachers will be able to gain and share experience by lesson observation… There are two observers, because sometimes two people may see two different pictures at the lesson. In this way, the mentees will master action research (Arai, Int. 10/11/18).

All in all, three participants agree on the sentiment that at the initial stage mentees can be requested to be a critical friend of the researcher. During the research process, the young teacher gets interested in it and obtains an opportunity to solve the problems within the classroom, as well as some issues concerning their own teaching, such as poor ability to make contact with the students, improper provision of the new theme to the students, students' misunderstanding of the new lesson, and bad behaviour. Only one teacher, Balausa, mentioned that her critical friend was her mentor, and she admitted that she had received a lot of help from her. In addition, she emphasized the significance of having a well experienced critical friend when conducting research.

It is noteworthy to point out that the course moderators also encourage teachers to act as a critical friend to each other and emphasize the importance of doing so. The following excerpts from the interviews with the course moderators clearly illustrate these tendencies: "...my teachers make lesson observations. Observation of the students… We try to invite each other to our lessons as critical friends. Then we take the observation sheets and utilize them when writing an article" (Shyryn, Int. 14/11/18). "The teachers make alterations into their actions only with the help of the critical friend's opinions and viewpoints…" (Aisha, Int. 10/11/18).

Action research as a tool to raise students' learning outcomes. Along with perception of acton research as a tool for solving the classroom problems supported with colleagues' and students' cooperation, it is considered to help raise the 'quality of

knowledge'. According to my research participants, 'quality of knowledge' is a term, which means evaluation and validation of students' learning outcomes. In order to calculate the quality of knowledge, the teacher finds out the percentage of the students, who received 'A's and 'B's either for the test or as the term mark. If the percentage is big, the quality of knowledge is considered to be high.

With the help of action research, most of the teachers intend to assist their students to learn better and subsequently get higher points in the internal summative assessment that takes place at the end of each term. "When the student is fully engaged in tackling the problem, it also affects his or her performance during the lesson. Thus, the student's quality of knowledge goes up", said Balausa, an English teacher (Int. 8/11/18), who had been doing action research for more than two years. The next comment also illustrates that the major goal of the teacher's engagement in action research is assisting students with their learning: "Research is significant for me. First of all, I need it to see the achievements of my students, to enhance my teaching experience in order to improve student learning…" (Gulzhan, Int. 6/11/18).

Aisha, a course moderator, supports the similar idea by providing the following example:

In our school there are some teachers who give students a higher mark than they earn. This is a real problem, because teachers are not helping the students to improve. Why don't those teachers strive to develop students' learning abilities? If they conduct research, the quality of knowledge will definitely grow (Int. 8/11/18).

To support her claim, Aisha describes one instance that she witnessed in her teaching practice:

I cannot help mentioning one occasion that happened last year. There were History teachers who conducted joint action research in the class where I was teaching.

Once, I started to realize that the students' writing skills were changing for the better. I mean they began to write essays well by distinctively stating their arguments and justifying them. Owing to the research by History teachers, the quality of knowledge in my subject has increased. Do you see the effect? (Int. 8/11/18).

The above mentioned statements illustrate the positive effect of action research on student learning. Aisha's example clearly demonstrates that the impacts of action research are not limited to one subject, but instead can be seen in other courses across the curriculum.

The majority of the respondents pointed out that they would measure whether their research was effective by comparing the summative assessment results. In other words, in case the students demonstrated good knowledge during their summative assessment for the term, the teachers believe that their action research positively influenced their own teaching practices and consequently positively influenced students' learning outcomes. During the interviews the course moderators also verified that the teachers mostly rely on summative assessment results to evaluate the efficiency of their research. In some cases, students' term results (mainly the quality of knowledge) are also compared.

Teachers' Action Research Implementation Practices

All the research participants claim that they are aware of the action research stages. However, different participants interpret the stages in different ways, thus a variety of perspectives were expressed while talking about how the researchers implement action research into their teaching practice, and what stages they comply while doing action research.

According to an Art teacher, Zhadyra, action research is implemented in the following stages:

The first stage is identifying the problem. The second stage is the significance of the problem. The third stage is creating problem tasks. Then I think of the methods that can be applied to solve the problem. Next come the subject and object of research, by that I clarify what I will research and whom. Then I make an action plan, which is very detailed and accurate. The action plan includes the information about the lessons I conduct. I thoroughly write the activities when I plan the lessons and then conduct them. Also, there is reflection after each lesson, I mean teacher's reflection on the lessons. Only after all these activities I come up with my findings and conclusion (Int. 7/11/18).

It can be seen that Zhadyra's description of action research stages does not mention anything about research methods and reviewing literature. Also, the teachers' answers to the interview questions and probing revealed that she and other researchers reflect on their actions in their minds only and they do not write their reflections.

The comment below illustrates another understanding of the stages of action research:

The initial stage in conducting action research is to identify the direction that I would like to investigate. The second stage is getting acquainted with relevant literature, because I have to thoroughly know the topic that I am working on. Then I meet the school psychologist to talk about the students participating in my research. The reason I do this is that mainly I involve the students who struggle with their learning. The next stage in my research is to conduct a survey. I conduct a survey at the end of each lesson in order to find out which math problems were difficult or easy for them, and how they were able to deal with them. After this, I analyze the students' responses and take the findings into consideration when planning the next

lesson. I do this until I get the expected outcomes, and this takes a lot of my time (Arai, Int. 10/11/18).

This response suggests that the researcher does not clearly distinguish between a student reflection and a survey, and by conducting a survey after each lesson, she spends a great deal of time on it.

When Arai was asked how she would know if the expected outcomes were achieved, she said that her students' mood after the lesson and their feedback given to her in the form of reflection, as well as the results of the summative assessment, show her if the research was successful and led to expected outcomes. As can be seen, the researcher does too much work by making her students respond to survey questions after each lesson and asking for their feedback in the form of reflection, though the described two methods provide the researcher with the similar information.

It is important to mention here that the research practitioners mainly apply survey and ignore other research methods. They believe that the interviews are time consuming and sometimes do not encourage students to tell the truth because of uneasiness they feel in front of their teacher. None of the participated researchers has ever tried focus group discussions.

Gulzhan's words can serve as a good illustration, which supports this finding: "…The first step is to identify the significance of research with the help of observation. Then I must conduct a survey to test the significance. After that I start action planning…" (Int. 6/11/18).

All the participants of this case study research are of the opinion that they should conduct surveys. The interview responses described above showed that there are various reasons why researchers administer surveys. Furthermore, the teachers efficiently use the results of their surveys while writing a research article. They interpret their findings not

only in words, but also taking advantage of diagrams such as bar graphs, pie charts and tables. Twelve articles written by action researchers were subjected to analysis, and eleven of them contained visual representation of the data that were obtained from the surveys.

As for triangulation in research, only one participant (i.e. course moderator Lara) was found to be aware of this technique. Triangulation is not included into the action research course plans as a topic for consideration. As there is observed lack of collaboration between the course moderators when working on the course plan, triangulation was not approached at all (Lara did not share her knowledge about triangulation with other course moderators). This resulted in teachers' unawareness about the importance of validation of data through application and combination of several methods. Thus, the teachers became accustomed to using only one research method, with the survey being populiarized.

The analysis of the respondents' comments about the action research stages exhibited that the action researchers have got common understanding about how to organize the steps for research. They are all familiar with the first step, which is starting with determining the problem for research. It is noteworthy to point out that the majority of the written articles accurately portray the problems the action researchers worked on. However, the subsequent research activities are described in different ways. Teachers frequently spoke about the "significance of the problem", which can be a part of the research article, but not an action research stage.

Interestingly, two teachers and one course moderator stated that action research procedure involves making a hypothesis. The course moderator hammered this belief into her mind and even made other teachers accept it, which initiated more confusion about the action research stages. The teachers, who spoke about making a hypothesis, share the thought that they need to test that hypothesis when doing action research in the classroom.

One more crucial aspect, which is devoid of the attention of researchers is literature review. The analysis of the research articles disclosed that the researchers crudely review the literature related to their topic. One article provided a well-written literature review, while three articles did not have any review at all. The rest of the articles presented literature reviews, but they only described the definition of the concept which the research was based on (for example, differentiation, assessment, modeling, etc.) without critiquing or discussing the previously done research results.

Nonetheless, it was noticed from the articles that the teachers are skillful at recounting the actions they orchestrate on the way to solve the issue within the classroom. The actions comprise various teaching activities the teachers use. All the examined twelve research articles described what was taking place during the lessons and how the activities were exercised.

Challenges Teachers Face

While analyzing the interviews with the action researchers, several common challenges were identified. In addition, the respondents tried to find out the causes of those challenges, shared their experience about how they deal with them and came up with their own recommendations with regard to action research practices in the school.

  Lack of knowledge about the action research stages. Despite the fact that teachers understand for what purpose they conduct action research, when it comes to terms of implementation and following the action research stages, they hesitate to describe the steps they make on the way to solve the action research problem. For instance, Asan, an ICT teacher, struggles with showing the connection between his actions while doing research:

   First I set a goal for research, then plan the activities. After I clarify the activities, I

   prepare the questions. I use the prepared questions when I create a survey. The

survey is compiled for both the teachers and students. After they respond to my

survey, I analyze their answers. Their answers help me to create new survey

questions…There are different methods that can be used at the lessons while

research. I search for the methods on the Internet. If I understand the method, I use

it. In fact, I never apply the methods I do not understand myself (Int. 6/12/18).

As can be seen from Asan's response, it is evident that though he claims he knows

the stages of action research, in fact he has difficulties with applying them. Moreover, his

responses have shown that he does not differentiate between research methods and

teaching methods. This situation is common with the majority of the participants, even

though they weekly attend the school-based action research courses.

The next response by Biology teacher Aizhan shows that the researcher struggles

with understanding the action research stages:

I read about the stages of action research in the literature written in the Kazakh

language. They differ from what is written in the foreign sources. But I do not

know which information about the action research stages is correct. I just use those

stages that are convenient for me (Int. 1/11/18).

As seen from Aizhan's response, lack of credible sources in Kazakh and Russian

languages confuses teachers even more and contributes to misunderstanding about the

action research stages. "I do not fully understand the action research stages. This obstructs

me from writing my report as well. I do not know how to describe the steps", worries

Zhadyra, an Art teacher (Int. 7/11/18).

One more surprising thing is that the majority of research practitioners and course

moderators have never heard of the notion "action research cycle". While being asked a

question about how they can describe the action research cycle, eight out of ten

interviewees made surprised faces or smiled with nodding that they do not know about it.

This finding can be demonstrated by the following quotes: "I do not know the word "action research cycle" (Gulzhan, Int. 6/11/18). "There is a song "It all starts with a circle". Maybe it is about beginning a new research?" (Shyryn, Int. 14/11/18). "At the moment I have forgotten what the cycle is" (Aisha, Int. 8/11/18). "I have never heard about the action research cycle" (Zhadyra, Int. 7/11/18). "I am afraid I need a hint here" (Balausa, Int. 8/11/18).

Bek, who did not hesitate upon hearing the question about the action research cycle, responded in this way:

The cycle comprises of problem identification, data collection, data analysis, action planning based on the analyzed data. Then comes the new data analysis, i.e. you analyse the benefits and drawbacks of the applied actions. After that, new actions are planned and applied. These processes are repeated until you reach a conclusion (Int. 26/03/19).

Arai conveyed her thoughts on the action research cycle saying:

First, it is identifying the problem and the researched class. Then comes collecting data and analysing that data. Next comes planning the lesson, observing the lesson with the assistance of the critical friend, analysing the lesson, making modifications if necessary, and repeating the actions again (Int.10/11/18).

The interviewees' such remarks depicted that only two participants have valuable insight about the action research cycle.

Insufficient support from action research course moderators. All the seven teachers, who participated in my study, attended the in-school action research courses. Among them, four attendees reported they were not satisfied with the quality of the courses. As a result, this led to poor teacher assistance. History teacher Gulzhan expresses her worry by saying:

I attended the school-based action research course last year, to be frank, I did not

like it very much. My personal opinion is that the quality of the course needs to be

improved. I feel I did not receive the necessary information to its full extent. In

order to fill in the gaps, I had to study by myself a lot…I want to have a good

mentor on research who can show me the right way (Int. 26/11/18).

The statement below reveals Zhadyra's concern about her research topic:

I have a research topic, but I am doubtful about its correctness. My course

moderator also said that my topic is a little bit confusing and difficult to understand.

We tried to change it together, but we are both not sure whether it is proper or not

(Int. 7/11/2018).

The respondents' words reveal the fact that the teachers do not always get adequate

support and assistance from the course moderators. When the participants were asked why

they think this happens, all of them were of the opinion that the course moderators were

not trained to be trainers in action research, thus they did not have enough qualifications to

provide them with appropriate support.

During the interviews, the course moderators mentioned that they have to supervise

5-6 groups of action researchers, who come from different subject departments. This

provokes some difficulties for them. The following example is representative of the

thought about the hard work the course moderators are doing:

In my group I have teachers from different departments, and I do not know the

specifications of their subjects. Their research topics are very much related to their

subjects, and when the questions arise, for example, about differentiation in the

class, I hesitate to help them (Aisha, Int. 8/11/18).

Lara reiterated this concern by saying: "The groups that attend my course have

different research directions. It is inconvenient for me, because the research topics are

different. This causes difficulty for me to guide all of them at the same level" (Int. 27/03/19).

As stated by the course moderators, the number of groups affects the quality of their work. The moderators have 5-6 groups, and each group needs attention and assistance from them. One hour a week devoted to the in-school courses is not enough for the course moderators to pay sufficient attention to all of them.

In order to witness the teachers' learning, I observed two sessions of the in-school action research courses conducted in different groups by different moderators. Both sessions were conducted by moderators with three years of experience in the field. During the first session the course moderator made a presentation explaining the difference between qualitative and quantitative research methods. She prepared a good presentation, but she felt a little bit hesitant while responding to the teachers' questions. For instance, when the question arose about distinguishing between research methods and activities directed to solve the identified problem, the course moderator was not able to provide rational explanation of the difference of the two notions. The observation of this session demonstrated that both course moderators and teachers experience lack of knowledge about research methods and action research stages. What I liked about this session is that the moderator emphasized the importance of using several research methods, and the teachers reflected on which research methods they could apply particularly for their research.

The second session was dedicated to the moderator's presentation about the research she presented at the international conference in Astana two months ago. Throughout the session, she talked about her research and answered the questions that arose from the course participants. The only research method used by the course moderator

in her research was the survey, which, as she stated, helped her to identify her students'

learning needs.

Time constraints. Another difficulty reported by almost all the respondents is lack

of time, which is brought about because of teachers' duties within the school. Teachers feel

that they are loaded with much work, and utterly have little time to commit themselves to

research. The following statements by participated teachers exhibit the issue of time

deficiency for doing research as well as its causes:

The most challenging thing for me is lack of time. I know that action research

should not be done in haste. However, we have a lot of other responsibilities, which

need to be done immediately. As a result, we place action research to last place and

do not pay sufficient attention to it (Aizhan, Int. 1/11/18).

Arai sees the issue of lack of time as a big problem that stems from professional

duties she carries out. As she related in her interview:

The main trouble for me is time. I am involved not only in action research, but also

I take part in the work of "creative groups" functioning in the school. Currently, I

am the member of the groups on teacher attestation and differentiated instruction.

Last year I was the Head of the Department and was handicapped with a load of

responsibilities (Arai, Int. 10/11/18).

Balausa reflected on her experience by saying: "Currently I am doing research with

several teachers. We do not have time to meet, because when I am free, others always have

something to do. This is the reason why we cannot finish our research work" (Int. 8/11/18).

The participants' such responses suggest that they do not give proper attention to

action research owing to heavy workload and additional duties they have within the school.

Normally, every teacher teaches 18 lessons a week. In case there is scarcity of teachers, the

number of lessons may increase up to 26. Besides the lessons, the teachers spend a plenty

of time on planning the lessons, writing the detailed lesson plans, preparing worksheets

taking into account different levels of the students, designing formative and summative

assessment tasks. There are two types of summative assessment the teachers need to

prepare. The first one is summative assessment for the unit, which is compiled and

conducted after the students study the particular topics. The second is summative

assessment for the term, which is developed and reviewed by the teachers up to a certain

date and taken by the students by the end of the term. Moreover, teachers check all the

summative assessment tasks, and record the results into the electronic journal. By the end

of the term, the teachers submit the term report on the students' performance (based on the

term marks) to the head of the department. Provided that there is a student, who got a bad

mark (either 'D' or 'E'), the teacher is requested to deliver a report on why the student has

unfavorable learning outcomes. Furthermore, teachers need to attend meetings scheduled

by the school administration on different matters. They make observations of the

colleagues' lessons, conduct extra lessons and out-of-classroom activities. The described

activities are done by just an ordinary teacher. However, there is a number of teachers with

some additional responsibilities. There are heads of the department, coordinators on the

programme, on assessment, on differentiation, on student competitions and research

projects.

When being interviewed, two course moderators affirmed that action researchers of

the school combat with finding enough time for performing research due to work overload,

whereas one moderator expressed her scepticism towards the problem of time shortage

stating that teachers use this to defend their unwillingness to carry out action research.

In addition, the issue of time is affecting the type of action research the teachers

apply. Six out of seven researchers reported they prefer to be engaged in individual

research. It was found out that these teachers avoid joining others due to the matters with time.

I planned to attend teacher group meetings, but no meetings occurred during the period of my research study. The teachers know that they need to meet regularly and claim that they try to find time for assemblage, but practically it does not happen.

Language barrier. The research practitioners understand that a lot of research papers are mainly written in English, and it is quite difficult to find resources and well-written research reports either in Kazakh or Russian languages. A brilliant example of this issue can serve the following statement of an experienced action researcher, Aizhan:

Before starting action research, I need to review a lot of literature regarding my topic. But I find this step quite difficult, because I am experiencing language barrier. It is known that the majority of the research is done in foreign countries and written in English. There are some in Russian, but they are not many. In addition, I think the research written in English is more reliable than written in Russian. As for Kazakh, there are no research papers written in this language. I often refer to English language teachers, but it is not convenient for me to bother them all the time (Int. 1/11/18).

It can be seen that the researcher can not get access to the relevant literature according to her research topic as she does not have sufficient knowledge of the English language. One more hinderance is lack of credible sources in their native language (either Kazakh or Russian), which really prevents them from producing good research practices.

Lack of written reflection. The participants of the study admitted that they do not reflect in written form. "What I really need is to register my reflection on paper. I plan my lessons and try out different methods, but reflect in my thoughts", confesses Arai, Mathematics teacher (Int. 10/11/18). "The most difficult thing for me is to write my

thoughts on paper. I know that I have low writing skills. This also hinders me from writing articles upon completion of research", says Asan, ICT teacher (Int. 6/12/18). "I reflect on my each activity every day. I reflect on what was successful, what did not work well, and what I need to do to improve the situation. I reflect in my mind and never write", admits Gulzhan, History teacher (Int. 6/11/18). "My course moderator told me I need to reflect after each lesson. But I have not started it yet", says Zhadyra, Art teacher (Int. 7/11/18).

The teachers' responses demonstrated that even though they reflect on their actions, they do not write their reflection and thoughts either on paper or reflective journal. Furthermore, one of the course moderators, Aisha, alluded to teachers' reluctance towards writing reflections by saying:

> Based on my observations throughout three years, I can assert that researcher teachers do not write reflections. This is manifested in their action research reports, where they just describe the activities, but do not expose their reflective thoughts. The teachers do not take any notes when they attend the courses. They listen to me a lot, but do not put down anything in writing (Int. 8/11/18).

The Ways in Which Teachers Address the Challenges

Alongside with the challenges teachers confront in their research practices, the interview responses aided to unveil the activities they fulfil on the path to surmount the obstacles.

The ways to cope with a language barrier. Attending language courses is seen as the main approach teachers apply to overcome the language barrier: "We try to settle the issue with the English language by attending courses on our own. I can say we are trying, but it is difficult to understand academically written articles", concedes Aizhan (Int. 1/11/18). The same strategy is applied by Bek, who says:

Since the beginning of this academic year I have been enrolled in school-based

English courses. I am still at the beginner level, and my progress is quite slow.

However, I do not throw up my hands, and believe that I will acquire this language

(Int. 26/03/19).

The researchers are doing their best to resolve the issue of language barrier by

studying English hard. Even though they still have small achievements, their beliefs and

hopes inspire them not to suspend to learn. In addition, one of the course moderators, Lara,

reported that teachers frequently address Google Translate service to make translations of

the information and articles that they need. Another course moderator, Shyryn, said she

had always proposed her teachers to utilize the service of Google Translate. As seen from

the interviewees' and course moderators' responses, they have derived their own solutions

to tackle the issue of language barrier.

The ways to cope with the issue of time constraint. When action researchers

were asked how they dealt with the issue of lack of time, most of them said that together

with their research group they appoint the certain time for meeting and discussing things,

but a lot of cancellations occur due to a busy schedule and tasks given to them from the

"top". "Personally, I find time for my research, but I cannot influence other people's time

and sense of responsibility", regrets Balausa, an English teacher (Int. 8/11/18). She sees

this issue as the one that cannot be resolved by other people unless the researchers

themselves take actions towards it.

Nonetheless, the course moderator Aisha has her own strategy to overcome the

complication with teachers' time management:

The teachers like it when they are demanded to do something. Sometimes it seems

to me that they need an authoritarian approach. There were the times when I would

knit my brows depicting my annoyance and frustration, and reproaching them for

producing no results. And this worked. They felt embarrassment for their

unenthusiasm to find time for their research (Int. 8/11/18).

Aisha's experience indicates that the teachers need the driving force that will urge

them on administering their research. Another course moderator, Lara, says that she

noticed several teachers who would stay after the working day to write their articles on

action research.

The ways to cope with the issue of lack of knowledge about the action research

stages. While talking about the ways action researchers practise to settle the issue of lack

of knowledge, a Biology teacher Aizhan shared an interesting piece of information:

Recently I have attended an international conference held in Astana. While being

there, I heard from the other researchers and academicians that people often

confuse research methods with teaching methods. That is a problem not only

concerning us, in fact it is a world-class issue (Int. 1/11/18).

However, Aizhan did not ask conference participants about how they usually deal

with the given issue. Nevertheless, she shared her own experience of learning: "The first

year was the hardest. We had to learn by searching materials about action research and

reading articles of different researchers" (Int. 1/11/18).

Aizhan spoke on behalf of the teachers, who were the first to be involved in action

research. The pioneers had to rely only on themselves and self study was the best way for

them to explore the basics of conducting action research. Gulzhan, who has also been

engaged in action research since the opening of the school, applies the similar strategy. She

describes her experience stating:

No matter how many months I spend on this, I consistently address the internet

sources and search for the information. I look through the materials, sometimes

read the theory thoroughly again and again until I fully comprehend the aspects of the research methods (Gulzhan, Int. 6/11/18).

As seen from Gulzhan's remarks, she has developed the habit of reading a lot in order to gain necessary knowledge. This has happened to many teachers due to the reason that from the outset action researchers did not receive any training to orchestrate action research, but they were requested to be involved in it.

The teachers, who joined later, worked out some other approaches to deal with the problem. For instance, Asan, an ICT teacher, expressed his method by saying: "There are research methods that I understand, however there are some methods that my mind cannot accept. I just try to exercise those that are agreeable with me" (Int. 6/12/18). Another solution is applied by an Art teacher Zhadyra, who says: "Whenever I have a problem concerning my research, I go to my course moderator for help. She gives me a detailed explanation, and based on that I make corrections to the steps I make" (Int. 7/11/18).

Every researcher has found the resolution that is the most convenient for them. Yet, the researchers with three years of experience witnessed harsher times compared to those who took up action research thereafter. The latter group of teachers can address more experienced ones for assistance as well as their course moderators.

The ways to cope with the issues of insufficient support from action research course moderators and lack of written reflection. It is important to note that the participants of the in-school courses hesitated to comment on the ways they utilize to tackle the problems concerning scarce assistance from the moderators' side and deficit of reflecting in written form.

The interview results showed that inability to influence the first problem is triggered because of a number of obstacles. There is an anxiety of looking obtrusive and ignorant in front of their colleagues, and this hinders the teachers from addressing the issue

of poor support they receive from the moderators. In addition, the researchers can not convey their concerns to the school administration, because they do not dare to complain about the course moderators, who are their colleagues. On the other hand, the course moderators struggle with accommodating the action researchers' needs because of the difficulties they confront, such as inability to undergo trainings resulting in lack of knowledge, shortage of resources in their native language, language barrier that impedes access to the information presented in English.

> Regarding the second problem, a Physics teacher Bek expounds upon it in this way: I want to write reflections after each lesson, but I am not accustomed to it. This is happening almost to all the teachers of our school no matter whether they are researchers or not. When the inspectors from Astana came, they also noticed that teachers do not reflect on their lessons. They told us to reflect. The school administration did the same, but there is still no outcome (Int. 26/03/19).

As it is seen from Bek's reply, there were attempts to resolve the issue regarding written reflection, but no certain actions were performed. The teachers received oral recommendations, but nobody supervised and monitored whether the researchers occupied themselves with writing reflections. Thus, the issue has remained unaddressed.

Recommendations Made by Participants

At the end of the interviews, all the participants were requested to offer their own recommendations upon improving the existing action research practices in the school. They made a number of suggestions that could help alleviate some of the issues they had talked about during the interviews.

One of the proposals brought forward by the participants is to formulate research groups by putting a more experienced and a less experienced action researcher together.

When working in cooperation, the latter researcher learns about action research in practice. This makes the learning more efficient and productive.

Some of the course moderators as well as the course participants admit that there are teachers, who need authoritarian approach, and there has to be a rigorous supervisor who pushes them towards doing action research. This supervisor has to take a strict control over the teachers' research practices, regularly monitoring their progress, at least once a week. According to the respondents, when the teachers feel some power, they strive for taking responsibility for what they are doing.

The next proposition expressed by several interviewees is aimed at overcoming the difficulty with time. They suggest that the school administration should afford the teacher researchers a day for action research. On this day the researchers should be free from lessons so that they can totally engage themselves with the research procedure.

One more recommendation mentioned by the participated teachers is that the outcomes of the previous action research practices should be disseminated throughout the school. There is an annual regional conference arranged by the school administration, but it is not sufficient enough to advertise the importance of action research among the school community. Some of the interview participants adhere to the belief that when various research-based events and activities are frequently held within the school, this may contribute to raising schoolteachers' interest and commitment towards action research. There was one more proposition by one of the course moderators that the school should hold a contest on the best action research project, which can serve as challenging stimulation for teacher researchers.

The course moderators also uttered their own suggestions for improving the work of the in-school action research courses. They offer another way of formulating groups for the courses. In other words, instead of having 'beginner', 'continuing' and 'advanced'

groups, the moderators believe that it will be more efficient to have groups of teachers with different levels of experience in action research. Having mentioned the fact that each moderator has 5-6 groups of teachers to guide, they suggest that each of them should have only three groups for supervision. In addition, they believe that if the amount of time devoted to action research courses increases, their work will be more productive, and the groups will solve the issue of lack of time to some extent.

Summary

This chapter presented the findings that were derived from the analysis of the data from my study of teachers' understanding about action research, how they design and implement its stages into their practice, the nature of the challenges the teachers face, and where those challenges stem from, as well as the ways the teachers set in when dealing with the challenges. All the participants' interview responses reflect a common and clear understanding about why the school teachers implement action research into their teaching practice. The findings revealed that there are researchers, who lack knowledge about action research stages. Despite the fact that they are supported through the in-school courses on action research, the teacher researchers feel they do not get sufficient assistance that they need to carry out their action research projects successfully. Also, the findings helped to identify a number of other challenges such as shortage of time to conduct action research, language barrier that hinders access to the literature written in English, and lack of written reflection, which is an important component of the action research. The teachers have worked out their own strategies for coping with the existing challenges. Even though the action researchers have not utterly solved the issues, the steps they are taking still help alleviate some of the challenges they face.

Chapter 5: Discussion

The previous chapter presented the study's main findings, which were collected from the analysis of semi-structured interviews, course session observations as well as reviews of action research articles and reports. This chapter analyzes and discusses the findings in light of both empirical data and insights from relevant literature.

Teachers' Understandings of Action Research

Participants perceived action research in a number of ways including: action research as a tool to tackle issues in teaching and learning process, as a collaborative practice for improving teachers' practices, and as a tool to enhance students' learning outcomes.

Action research as a tool to tackle teaching and learning issues. The findings of this study demonstrated that when the schoolteachers engage themselves in action research, they hold the purpose of solving the problems occurring in their teaching practice. The nature of the problems varies from teacher to teacher, subject to subject and class to class. However, the major problems are the ones that concern the teaching and the students. This finding is in line with what Levin (2006) describes in her article on action research. She provides examples of the classroom problems, such as conflicts between children and using the formal curriculum maintaining students' interest to the lesson, and describes action research as a tool that comes to the rescue and assists teachers with finding the problem and solving it. She also adds that action research enables teachers to become "an ongoing problem solver and experimenter" (Levin, 2006, p. 40). The teachers who participated in my study also see action research as an effective way of solving the problems they face in their classroom teaching. They believe that action research allows them to systematically identify a problem, why it arises or the causes of the problem, then finding alternative solutions to the problem. Several authors also confirm the fact that

teachers address a good range of problems through action research (Hansen & Brady, 2011; Lim, 2007).

Action research as a collaborative practice. Almost all the participants of my study agreed with the view that action research is productive when it is done in collaboration with other teachers (colleagues, mentors or mentees) as well as students. In the study of Pellerin and Nogués (2015), the teachers were involved in collaborative action research project. The researchers found out huge benefits of this collaborative venture for the teachers. On one hand, there was positive impact on teachers' reflection, inquiry and teaching practice. On the other hand, the students' motivation, behaviour and learning were positively affected. Additionally, the teachers started to recognize themselves as the main agents of change in their classrooms and schools. Similarly, the participants of my study noticed the positive influence of action research on young teachers' teaching practice. The improvement in teaching is seen when the teachers tackle complications in relation to class management and student learning. What makes my study distinct from Pellerin and Nogués' study is that more experienced teacher researchers attract novice teachers into action research by inviting them to be a critical friend. When being a critical friend and through a number of lesson observations, a beginner teacher learns about the processes of action research and understands its advantages for their teaching and student learning. Consequently, a teacher gets interested and joins the colleagues for collaborative action research.

Interestingly, the participants of my study understand the significance of cooperation and teamwork for action research, but no teachers' group meetings occurred within the period of my study.

The action researchers in my study rely a lot on cooperation with students. The teachers frequently conduct surveys and ask for the students' reflective thoughts on the

activities they applied at the lessons. Then, the survey responses and student reflections are utilized for taking the next steps of the research. The teachers perceive their students as their helpers, allies and friends, who are the main source of research data.

Action research as a tool to raise students' learning outcomes. The study conducted by De Borja (2018) found out that action research positively impacts students' academic performance. Specifically, 93% of the teachers in her study shared this opinion. Nonetheless, all the participants of her study consider action research valuable and "vital to the teaching and learning process" (p. 33). The participants of my study also pointed out the positive effect of action research on the students' learning outcomes stating that the teaching methods teachers employ help raise the quality of knowledge in the class. They believe that there is a close connection between the quality of their teaching and students' learning outcomes. The more their teaching fosters students' interest and active learning, the better students learn. This finding is consistent with Pellerin and Nogués (2015), who define the aim of action research as "to improve practice and to impact students' learning process and motivation" (p. 48). The positive impact of classroom research on student learning was also reported in research findings of several authors (Ulla, 2018; Conroy, 2014) and was confirmed by the participants of my study.

However, the findings of my study do not support the results achieved by Ulla (2018), in which the researcher identifies the main motivations for teachers to be involved in classroom and school research. The teachers in his study reported to be undertaking research solely to receive their master's and PhD degrees without bothering themselves much about solving classroom or school problems. The second reason found out by Ulla's study (2018) was that the teachers viewed action research as a means to get promotion to the next level, as research was one of the requirements to get promoted resulting in salary raise. In the specialized school, where I conducted my study, participation in action

research or lesson study is a necessity that ensures successful teacher attestation (in other words, job promotion and salary increments). Despite this, the researchers did not mention this requirement during the interviews. In comparison to the teachers in Ulla's study (2018), the teachers in my study do not pursue the purpose of getting promoted and gaining salary increase, or working for their postgraduate degrees, but strive for other goals, such as improving their teaching practice as well as student learning, solving classroom problems and stimulating cooperation between colleagues. This finding is quite encouraging, and demonstrates that teachers take up action research not for personal or financial benefits, but for professional growth and enhancement of student learning.

Teachers' Action Research Implementation Practices

Lim (2007) discusses about the notion of 'methodological constraint', which affects the quality of action research conducted by teachers. This constraint is induced by two reasons. The first reason is that teachers do not gather enough data to support their findings (Foster, as cited in Lim, 2007). Secondly, "a more balanced action research model is needed" (Lim, 2007, p. 3). Due to these two reasons, there is a risk that teachers produce low quality action research. In order to avoid this, Lim (2007) suggests that teachers should apply both quantitative and qualitative designs to ensure that triangulation takes place and divergent viewpoints are looked at. In addition, he proposes a balanced action research model the teachers can follow when they do their research. After analyzing my participants' interview responses, I found out that most teachers mainly use surveys and compare the students' summative assessment and term marks to interpret the findings of their action research. This demonstrates that the teacher researchers only exercise quantitative research methods to carry out their action research projects. In other words, there is not much 'action' in their action research but mostly 'research' (surveys) to find out students' learning outcomes. By less action I mean lack of collaborative group

meetings amongst teachers, meetings with moderators, joint planning and systematic reflection before and after their lessons. Practically all the participants of my study mentioned surveys as their main research method with the help of which they discover students' attitudes towards the researched issue, students' preferences about teaching methods and the challenges students face within the framework of the investigated problem. There are also teachers, who use the surveys as a mechanism for student reflection. At the end of the lesson, the teachers hand out the surveys with reflective questions to all the students in the class, analyze them and make use of the results when planning the next actions (the actions are mainly lessons). There is also a group of researchers, who conduct surveys two times throughout their action research. The first survey is taken before the actions start, while the second one is done after all the actions were completed. Otherwise stated, the researchers conduct surveys at the outset of the research and by the end of the research in order to see if the students' responses changed. In case the students provided positive answers, the action research is considered to be successful with favorable results. As the study participants reported, most of the students' answers very often meet the teachers' expectations. Consequently, the teachers come up with the findings that point to students' better learning outcomes.

According to other researchers of action research, triangulation is essential for ensuring validity and trustworthiness of research outcomes. It is a process when multiple forms of evidence and perspectives are compared and contrasted before conclusions are made (Altrichter et al., 2005; Elliot, 1991; Pine, 2009; Schmuck, 2009). However, in my study, the participants' interview responses as well as the reviews of the action research course plans confirmed that the concept of triangulation is not included as a separate topic for consideration during the course sessions. Thus, the teachers are not aware of the significance of triangulation for their research, and this results in their applying only one

and sometimes two research methods. In addition, they do not share the common vision of

the action research model. The teachers just follow the action research stages, which are

convenient for them or which they believe are appropriate.

Challenges Teachers Face

The school arranges action research courses for all the interested teachers. The

courses are run by the moderators, who are recognized as the more experienced action

researchers. The interviews conducted with them revealed that the moderators themselves

did not undergo any special training on action research before they had been appointed the

course moderators. Edwards (2016) tells about the similar action research courses, which

are coordinated in Australia and the UK. What makes these courses different from those

offered at my research site is that they are conducted by experts in teacher-research and

financed by Cambridge English Language Assessment. In order to be enrolled in the

courses, the interested teachers need to submit a briefly written research proposal as an

expression of interest. By the end of the course the participated teachers submit the

reflective report outlining the impact, benefits and challenges they have experienced when

taking part in the courses. Upon completion, the teachers make conference presentations

and publications of their action research reports (Edwards, 2016).

The situation in the school, where I conducted my study, differs a lot from how the

things work in Australia and the UK. In both Edwards' and my studies, the action research

courses last for nine months. The school in my study hires its own teachers (without any

well-received knowledge or expertise) to teach the courses. These teachers are labeled

course moderators, but do not receive any funding or incentives as a reward for their work.

There is no particular system of admission of the participants for the course. Thus, the

course is available to everyone. As it was described in the first chapter, every Saturday of

the week is assigned a day for professional development, and the teachers choose which

course they would like to attend. There is a good range of in-school courses arranged for the teachers. Nevertheless, a lot of teachers register for the action research courses. However, having failed to be satisfied with the quality of the courses and to obtain sufficient support from the moderators, many teachers produce low quality research works. Also, there are several teachers in the school, who abandoned action research without being able to complete it.

According to Hine (2013), there are action research programs for Master's students at the Universities of Notre Dame in the USA and Australia. The core idea behind these two programs is to provide students with the knowledge about action research purposes and processes. The students carry out action research throughout the program and produce their own action research projects. In contrast, most Kazakhstani universities do not offer any action research programs. My research participants also confirmed that none of the universities where they studied offered any action research course or project.

Since 2013, several specialized schools in Kazakhstan were assisted by the team from the Faculty of Education in Cambridge University in terms of developing collaborative action research and reflective practice, so that the schools "take ownership and develop their own vision for the work" ("University of Cambridge", n.d., Classroom Action Research section, para.2). However, the specialized school, where I conducted this study, did not fall into this category of schools, because it was opened in 2015, two years after the Cambridge University interventions. None of the schoolteachers was granted an opportunity to participate in the internships or workshops conducted by experts from Cambridge University. The majority of the course moderators and teachers are self-taught researchers, but they still face the problem of language barrier and cannot access the wide variety of resources written in the English language.

As for reflective practice, the teachers in Pellerin and Nogués' study (2015) made informal and intuitive reflections about their pedagogical practice prior to their participation in collaborative action research. In other words, their reflections were not systematic, and the teachers did not bother themselves with questions about their teaching for the sake of improvement. However, action research brought favorable changes into teachers' reflective and inquiry habits. During the interviews, the teachers acknowledged that their reflections became more analytical, and they acquired the habit of reflecting about their own practice. In contrast, the participants of my study could not demonstrate that their engagement in action research has developed in them the skills and habits of systematic reflection on their actions. The teacher researchers are still exercising 'informal and intuitive' reflections just like the participants of Pellerin and Nogués' study (2015) did before starting collaborative action research. During the interviews, my participants reported that there are research practitioners, who reflect in their minds, which means that teachers reflect in their minds instead of writing reflective journal entries. Nevertheless, this kind of reflection is not very beneficial for teachers' reflective practice. Its inefficiacy is also seen in the reports and articles written by the teachers upon completion of action research. Almost all their articles and reports are delineated in a descriptive format rather than in a critical and analytical way. This rather contradictory result may be due to the fact that the teachers in my study were not communicated about the value of reflection for assessing the impact of planned activities and for making further modifications in action planning. Another possible explanation for this can be lack of teachers' own sense of responsibility for making their reflections more formal and critical. When being interviewed, almost all the teachers referred to shortage of time, one of the barriers reported in a series of literature on action research (Adler, 2003; Christenson et al., 2002;

De Borja, 2018; Gilbert & Smith, 2003; Hine, 2013; Winter, 1989), and which can be one more reason for the issue of lack of teachers' systematic and analytical reflection skills.

I was able to find out two research studies conducted in Kazakhstan that examined the challenges associated with action research practices. Madeyeva et al. (2016) specifically inquired into the barriers teachers in 20 specialized schools encounter when they carry out action research and lesson study. They distinguished two major barriers, i.e. teachers' low research skills and insufficient support given to the teachers with their research. These barriers accord with the challenges identified in my study. As Madeyeva et al. (2016) reported the teacher researchers make mistakes in research methodology, lack theoretical knowledge about research, and have difficulty with determining the research question and analyzing data. The participants of my study as well as reviews of teachers' reports and articles also described analogous challenges. When talking about the action research stages teachers follow, it was obvious that they were thrown into some confusion. One interviewee mentioned about the 'significance of the study', 'object' and 'subject' of research, which are not stages of action research. Some teachers believe that it is a must to conduct surveys, make and test hypothesis for their research. All these findings correlate with what Madeyeva et al. (2016) viewed as mistakes in research methodology and lack of theoretical knowledge. None of my study participants talked about problems with data analysis, but there was one teacher who struggled with developing her research question. Moreover, most of the action researchers claim that they do not get sufficient support from the course moderators, although the course moderators say they impart all their knowledge and experience to their trainees. The course moderators are of the opinion that the teachers should take more responsibility for their research rather than hide behind the lack of time.

The second research study looked into the problems of implementing action research in Kazakhstani schools (Nagibova, 2016). The researcher separated the problems

into academic and non-academic ones. The academic problems comprised lack of knowledge (including wrong understanding about action research, limited knowledge and limited research practice, low motivation) and lack of skills (time management, ICT, English language proficiency, reflection and research skills) for conducting research. Paucity of resources is characterized as non-academic challenge, which embraces shortage of resources and non-availability of research works in Kazakh and Russian languages, scarcity of literature explaining the research procedures (Nagibova, 2016). In contrast to the findings by Nagibova (2016), the participants of my study have elaborated a clear understanding about action research. In addition, despite their basic level of English language, the teachers of my study refer to English teachers' help when there is a possibility and make translations of necessary resources and articles with the aid of Google Translate. Deficiency of resources and literature is not seen as a complication for the action researchers, who participated in my case study research. However, lack of skills is also experienced by most of the teachers. Particularly, they are still working towards combating the issue of time, language and reflection skills.

The Ways in Which Challenges are Addressed

The study by Ponte (2002) looked into the role of the teacher educators in developing teachers as action researchers. She called them facilitators. At the beginning of the study, the facilitators viewed themselves as critical friends, "a role that in their experience was fulfilled mainly after the event" (Ponte, 2002, p. 415). Later on, it was found out that such a role was not very much effective. In order to secure efficient facilitation, the facilitators needed to take a different approach by actively maintaining ongoing support when teachers are engaged in their action research. As a result, the facilitators came up with five facets of support, i.e. cyclic, explicit, negotiated, forceful and critical.

During the cyclic approach, the facilitators planned the steps of action research as activities for the teachers to perform. The facilitators consistently referred the teachers to the phases of action research by encouraging teachers to look back to their actions and forward to their future plans. They attained this by asking reflective questions (Ponte, 2002). The course moderators in my study also pursued a similar strategy. When having course sessions, they constantly guided the teachers through action research stages. The moderators assisted the teachers with reformulating their research questions, developing and analyzing their surveys, writing the research reports and even with translating the articles from English into Kazakh/Russian and from Kazakh/Russian into English (using Google Translate service). During the course sessions, the moderators periodically aided them with clarifying the steps they needed to take in order to achieve the outcomes of their action research. In contrast to what the facilitators in Ponte's study did, the course moderators in my study failed to raise questions of a reflective nature.

The next pattern practiced by the facilitators in Ponte's study (2002) was the forceful model of support. In other words, the facilitators drove the teachers towards action research by explaining them that they should not make haste and take achievable steps instead, and by accompanying them with practical plans and feasible actions. An almost identical tactic was applied by one of the course moderators in my study. For the purpose of settling the issue with time management, one moderator behaves in an autocratic way giving the teachers specific instructions, setting deadlines for the activities they need to complete. Sometimes she had to show the signs of resentment to influence the teachers' sense of responsibility and commitment to action research. However, the facilitators in Ponte's study (2002) did not use to give instructions, but acted in a more friendly way by posing challenging questions to the action researchers.

The explicit model involved supporting teachers by making them understand why they were doing their actions and what they were achieving, whilst through the negotiated model "facilitators tried to convince teachers by force of argument of the most effective way of proceeding within the given circumstances" (Ponte, 2002, p. 417). On the other hand, the critical pattern of support implied leading the teachers towards understanding about "what they are doing and why that particular thing" (p. 420) by putting them thought-provoking questions.

The course moderators in my study did not apply the above-described three models of support. This is induced due to several reasons. To begin with, the course moderators were not specially trained for running the in-school action research courses. They did not get profound knowledge about its stages and research methods. In addition, the interview responses revealed that the course moderators do not reflect on their actions themselves. Consequently, they do not have expertise in asking reflective questions. To conclude, unawareness about the action research procedure and scarcity of reflective practice hinder the course moderators from providing good support to their trainees. Moreover, these two factors make the course moderators incapable to get out of the predicaments they are facing.

Hewitt and Little (2005) noted the key importance of the principal's role in promoting classroom action research in schools. To secure efficient learning environment, the principal should create conditions for the teachers' collaborative action research and maintain support through a coach or a person, who knows well about the action research practices. The principal of the school, where I worked on my study, provided considerable support to the teachers who would like to foster their professional development. Accordingly, every Saturday is assigned a day for attending the in-school courses, allowing the lessons start one hour later on that day. There are a wide variety of courses

both for novice and experienced teachers to select from. The courses for action research are organized for beginner, continuing and advanced action researchers and conducted by course moderators, who are considered more experienced research practitioners. During the courses, the action researchers are capable to assemble, discuss issues and share their research findings, which in its turn encourages cooperation among the teachers. However, these gatherings are not sufficient for teachers, and the majority of them feel they are short of time to conduct joint action research. One more substantial point to mention is that there is a group of teachers in the school, who have additional functions to fulfill alongside with their normal teaching responsibilities. This group of teachers struggle even more with finding time for their action research. Failing to meet frequently because of lack of time, most teachers often end up with individual research.

Hewitt and Little (2005) accentuated the significance of allocating time to collaborate when doing action research. These authors suggested that the school should practice certain tasks in order to guarantee that the teachers make enough time for their research. The first task is to "set specific times on the school calendar for action research" (Hewitt & Little, 2005, p. 17), which is also applied in the school, where I conducted my study. The researchers are given a fixed hour every Saturday. The second task is to "establish guidelines for professional development to include action research" (Hewitt & Little, 2005, p. 17). According to the school development plan, teachers are invited to be engaged either in action research or lesson study. In addition, the teachers fill in the individual professional development plans, where they indicate in which design of research they are involved. After the teachers decide on the research type they do, they work on it throughout the academic year and come up with their results in the end. In May, the school organizes the regional conference on research, where the teachers have an opportunity to present their research findings in the form of presentations and posters.

The other two tasks comprise designing a timetable that allows teachers to visit their colleagues, who have the same research topic, and "cover classes for teachers to collaborate on action research" (Hewitt & Little, 2005, p. 18). However, the specialized school does not adopt such approaches to alleviate the issue of time constraint. Even though the teachers cannot attend their colleagues' lessons and are not able to meet each other due to schedule mismatch, they do not request the school administration to change the timetable. Being unaware of this challenge, the school authority does not take any measures regarding this issue. As a consequence, teachers seek their own solutions to overcome this difficulty. Some teachers have to stay after the lessons to work on their action research, while others just prefer to continue their research individually, without assistance of their colleagues. There are also teachers, who are guided and directed towards following the action research stages thanks to the course moderators' strict supervision.

Summary

This chapter discussed the main findings of the study in relation to the literature. The results of the case study are consistent with other international studies. The teachers, who participated in my study, and those from other relevant studies share the common understanding about the benefits of action research for their teaching practice and student learning. In addition, the challenges identified in my study and those from other foreign and Kazakhstani research studies are quite the same. The researched specialized school is providing a great deal of support to the teacher researchers with developing knowledge about the action research process. Nevertheless, it would be beneficial if the school leadership approaches the successful experience identified in the studies from abroad. This may help overcome difficulties with time management, understanding action research stages and promoting reflective practice among the schoolteachers.

Chapter 6: Conclusion

This chapter summarizes the results of the qualitative case study. The chapter consists of three sections. The first section highlights the findings according to the four research questions. The second section explains implications of the study and puts forward some recommendations for policy and practice. The third section considers limitations and makes suggestions for future research.

Revisiting the Research Questions

RQ1: What do teachers understand by action research? The participants of my study came up with the three main benefits of action research for their teaching practice. First of all, teachers understand that action research helps them to solve the problems they face in their classrooms as well as in their own teaching. Secondly, teachers see action research as a collaborative process, which involves not only interaction between colleagues, but also between mentors and mentees, teachers and their students. Lastly, teachers admitted that students benefit from their engagement in action research, as they start to produce positive learning outcomes.

On the whole, all the participated teachers understand the impact of action research on their professional development. Although the action researchers did not directly mention anything about growing professionally, the fact that they engage in action research and their responses evidenced that action researchers are capable of solving issues inside the classrooms, cooperating both with their colleagues and students on the way to grapple with the problems, and helping students with achieving learning outcomes. All these activities make useful contribution to their professional growth, as teachers seek different ways of tackling the classroom problems, share and enhance their experience of teaching and providing effective student learning with the aid of interaction with other teachers and studying efficient teaching methods and strategies. There are evidences that more

experienced teachers attracted young teachers towards action research by inviting them to act as critical friends and observe their lessons. When observing lessons of action researchers and having conversations with them, novice teachers not only learn about various teaching techniques and approaches, but also realize that any classroom problem can be addressed through action research. Consequently they got motivated to engage in action research for improving their own classroom practices and students learning outcomes. Thus it can be concluded that collaborative action research promotes a culture of inquiry-based teaching, reflective practice, and exchanging best practice and collaboration amongst teachers. Such a culture, if sustained, can lead to turning the school into a learning community where teachers, students and school leadership learn from each other (Retallick & Farah, 2005).

Nevertheless, research practitioners of the specialized school do not use the benefits of action research to the full extent. For example, teachers did not mention about improving their reflective practice when carrying out action research. Although reflection is one of the main components of action research, the teachers do not always maintain reflective journals entries on their teaching practice and do not see action research as a way of improving their practice through systematic reflection.

RQ2: How do they design and implement action research? All the interviewed teachers could list the action research stages, but they did it with some hesitation. The teachers understand that they need to identify a problem and search the ways of solving it by applying a variety of activites at the lessons. In order to collect data, the researchers conduct surveys at the end of their research. Administering surveys is viewed by most of the action researchers as the only research method that provides data. Nonetheless, there are several teachers, who tend to ask for the students' reflections on the lesson and compare the results of the summative assessment as well as term marks to see whether the

utilized activities have been beneficial for student learning. None of the teachers is aware of triangulation of data except one course moderator. Even though this course moderator knows about the value of triangulation in research, she has never shared about it with other moderators. Thus, triangulation stayed unfamiliar to other moderators. It has never been included into the course plans. Consequently, triangulation has never been considered during the course sessions. All the action researchers do not conduct interviews and focus group discussions with the research participants due to their belief that students would never tell the truth when they are faced with the teacher.

In addition, some teachers mentioned the phrases, which were not actually the steps of action research. For instance, expressions used by the researchers, such as "to identify the significance of the problem", "subject and object of research", "to test the significance" are not discussed in the literature on action research. These expressions may have been inherited from the research design the teachers had confronted during the Soviet and post-Soviet education system, before the reforms in education were implemented. Thus, it can be concluded that although teachers are engaged in action research and get many benefits of such engagement, they hardly design and conduct their action research according to the cyclical stages of action research: identification of a problem, planning, action, observation and reflection, planning and action and so on. Their increasing workload, lack of knowledge about action research, and lack of support are some of the reasons why these teachers are unable to go through all the stages of action research.

RQ3: What challenges do they face in conducting action research? Why do these challenges occur? The first challenge the teachers encounter deals with knowledge about action research stages. The research practitioners hesitated when describing the stages, because they were afraid of being mistaken. There were a few teachers who had difficulty with differentiating between research methods and teaching methods. Lack of

resources in Kazakh and Russian languages is seen as one factor that hinders teachers from

studying about action research stages on their own. The teachers read a lot of internet

resources, but still this does not help much.

The second challenge is insufficient support and assistance the teachers receive

from their course moderators. The moderators meet their trainees once a week, but this

does not help the action researchers a lot. There were instances when the researchers did

not get an adequate answer to their inquiries from their course moderators. This happened

due to the fact that the course moderators did not attend any special trainings on action

research and did not have enough expertise in it. The only course they were able to attend

is the second level courses organized for all the teachers from secondary schools, where

the teachers acquire some brief information on action research. However, the information

they obtain during the levelled course is not sufficient and does not make teachers skilled

action researchers. One more impediment that contibutes to the described challenge is lack

of collaboration between course moderators. If moderators designed their course plans

collaboratively and took joint actions, they would gain a lot of knowledge from each other.

Shortage of time was reported by almost all the participants of my study. The

teachers struggle with finding time for action research as a result of their daily work

routine. Alongside with conducting their regular lessons, teachers are burdened with some

other responsibilties they need to fulfil. Due to differentiated schedule, teachers do not

frequently have an opportunity to meet each other to make planning and discuss issues

related to their research projects. Thus, most teachers end up with individual action

research, where little cooperation and collaboration with others take place.

Language barrier and lack of written reflection were identified as the other two

challenges encountered by the participants. Low level of English proficiency inhibits

teachers from accessing the literature and research articles on action research written by

scholars from western countries. Notwithstanding that reflection is the essential constituent of the action research cycle, the teachers do not reflect on their actions on a regular basis nor do they maintain a reflective journal. They have not developed the skills and habit of reflecting since the start of their teaching, which can be one cause of their avoidance of keeping a reflective journal or making reflective notes on paper.

RQ4: How do the teachers address those challenges? The research participants are making small, but worthwhile steps in learning English language. Despite their heavy workload, they attempt to find time to attend language courses and learn English at their own time and expense. In addition, the course moderators encourage the teachers to use Google Translate for making translations. This service makes direct translation, and can only provide the general content of the translated material. Therefore, Google Translate is not so efficient and accurate to translate research articles.

The teachers attempt to find time for their action research by allocating the group meeting time. Sometimes, even this strategy does not help due to teachers' busy schedule. However, there are some teachers who are committed to stay after school hours for completing their action research projects.

In order to make up for lack of knowledge, the participants oblige themselves to read a lot about action research. They often address internet resources, read the articles written by researchers. This does not relieve the situation a lot, because the teachers apply only those methods that they can understand. In case they do not comprehend what they read, they just do not apply them in their research practice.

The participants of the study did not tell about the ways they take up to tackle the issues of insufficient support from action research course moderators and lack of written reflection. These two challenges still stay unaddressed due to teachers' fear that it may have a negative consequence for them if they speak about insufficient support from the

moderators. Also, teachers are accustomed to some kinds of authoritarian attitude by leaders including course moderators, and such an approach pushes them to continue conducting action research. Ongoing supervision and monitoring are also necessary to maintain teachers' commitment to research and constant reflection.

Research Implications and Recommendations

This research study presents several implications and recommendations for educational policymakers and leaders of the specialized school, where the study was done.

Implications for me as a researcher. The overall journey towards this research project has been challenging but full of learning for me as both a teacher and a researcher. I have known about action research since 2014. At that time this research design was quite obscure to the teachers in Kazakhstan. The teachers were required to conduct action research, but lack of knowledge and experience made it difficult for most of them to understand it well. I tried some action research elements in my own teaching practice as well, however I encountered the same challenges as other teachers did. Later, having attended research courses at Nazarbayev University and working closely with my supervisor, I started to understand well the action research stages and methods. After conducting this study on teachers' understanding and practices of action research, I have developed myself into a more confident researcher. In addition, I became aware of some of the best action research practices and its benefits for schoolteachers. As a teacher, I will apply all the knowledge about research methods I have gained through this experience in my future action research projects in the school where I currently work. As an educator, I will share all my research expertise and knowledge with the teachers I work and collaborate with. I will conduct action research sessions and seminars for all the interested teachers and invite them to join research groups. I will provide guidance to the research groups with the steps they need to take so that they produce reliable and trustworthy

research results. The mentoring process, assisting beginner teachers, assessment and differentiated instruction practices, conceptual learning and collaborative lesson planning issues are the major foci I would like to work on with the research groups in the future. I believe that collaborative research will not only help solve issues within the school, but will give an opportunity to the teachers to make their voices heard and act as true agents of change.

Implications and recommendations to policymakers. The participants of the study have good understanding of the purpose of action research and the benefits they may gain by being engaged in this form of research. Nonetheless, they struggle with following the action research stages, which leads them to producing at times not very much reliable research results. Policymakers may help by encouraging more experienced action researchers to develop guidelines and handbooks describing the action research procedures in details and with some practical examples. The handbooks may be issued in Kazakh and Russian languages, as it is convenient for teachers to read them in their language of instruction. The authors of these guidelines and handbooks should be motivated to do this work by receiving incentives from the government.

The school, where I conducted my study, has a viable system of support to the teachers both with some and no experience in doing action research. The support is maintained through in-school courses, and has produced some outcomes. The school action researchers actively participate in the regional conference of teacher research arranged in the school every year. The teachers from mainstream schools are also invited to attend the conference, as the school is responsible for disseminating its experience to the regular schools of the region. However, the conference is held once a year, and this is the only chance for mainstream school teachers to listen to their colleagues' research presentations and gain some experience in action research. In order to strengthen the support being

provided to the teachers from regular schools, the government may allocate some funding to launch teacher exchange program. Within the program, teachers from secondary schools may have an opportunity to spend several weeks in the specialized school attending in-school course sessions as well as school lessons, taking part in small-scale action research projects and simply gaining experience by working side by side with their colleagues. In this way, regular schoolteachers would not only gain knowledge about action research, but they also will be able to apply the knowledge appropriately in practice.

Implications and recommendations to school leaders. As it was mentioned in Chapter 1, the school provides in-school action research courses for all its teachers. The teachers can select the course level they would like to attend in accordance with their expertise and experience in research. The school leaders may continue to maintain ongoing professional development workshops and mentoring support for teachers to develop their action research skills. In addition to the courses, the school leaders may also provide opportunities to establish strong collaborative culture among action researchers. To ensure this, the school leadership may allow protected time for teachers to meet each other regularly and work on their action research projects. The teachers will use this time to share their research findings, discuss the arising issues and consult each other to clarify the unclear matters. As a consequence, the teachers may develop an in-depth understanding of and advanced skills for carrying out rigorous action research projects.

Most of the participants mentioned about teachers' lack of responsibility when working on the joint action research. This issue may arise because teachers may not feel sufficiently motivated to conduct research. As a stimulus, the school may start to provide funding to teachers to present their action research in international conferences. Such stimulation may attract teachers' interest towards action research and trigger them to share responsibility for collaboration. Additionally, as proposed by one of the participants of my

study, the school may be open to publicize teachers' research projects to the whole school community. A good option can be organizing a healthy competition of action research projects in order to distinguish and award a well-designed and high quality project. Another alternative can be arranging a fair of teacher action research projects, where every researcher or a team of researchers may present their research findings in the form of posters or presentations (the school has several LED display monitors that can be used for presentations). When the research results are available and accessible to all, more teachers may be drawn to take up action research or start to feel responsibility for their unfinished research works.

The course moderators have taken on huge work in providing assistance and mentoring to the teachers of the school in their action research despite the fact that the moderators themselves were not specially trained on conducting such kind of research. Within three years, they have come a long way attempting to help their colleagues even though they feel they do not have sufficient knowledge in doing action research. In order to assist the course moderators to overcome the barrier of lack of knowledge, the school leadership may secure some time for their preparation before the action research courses commence. They should have the time and resources to meet several times to do long-range planning of the activities regarding sharing experience among several groups of course participants. Also, the moderators may collaborate to work on their course plans and adapt them according to the needs of research practitioners with different research proficiency. By means of joint work and partnership with each other, the course moderators will supplement and bridge gaps in their theoretical knowledge and practical expertise about action research. As a result, the course moderators may become more confident in their actions, and this may eliminate the belief that teachers do not get enough support from course moderators.

Limitations of the Study and Suggestions for Future Research

Although the research findings provide useful insights about teachers' understanding and practices of action research, there are still some limitations of this study. The first limitation is that the study was conducted in one specialized school, and teachers' understanding of action research in this school may not reflect that of those working in other specialized and mainstream schools throughout Kazakhstan. In case analogous studies are done in other schools, and the data gathered from all of these schools are compared and contrasted to each other to get the general picture about the understanding, implementation and challenges of action research, the research will become wide-ranging and comprehensive.

The participants of the study were selected in accordance with specific criteria, which may cause another limitation. The views of other teachers, who did not fall into those criteria, were not taken into account when this research study was conducted. In the future studies, more participants can be attracted to the research, and mixed methods research can be done.

The school, which was under investigation, is open to changes and novelties, and constantly works on improvement of the current condition and alleviation of the identified challenges. Upon completion of this research, the school leadership has already shown willingness and interest to put into action the recommendations this study makes. As a result, after a few years the findings of this study may become outdated. A new research can be done to see to what extent the things have altered.

Finally, the given research study was conducted within limited period of time. Therefore, a longitudinal study is needed in order to ensure more in-depth and elaborate data collection procedure.

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Appendix A

Invitation for the gatekeeper to participate in research study

Dear Principal / Director,

My name is …………………………….., and I am a Master degree student at Graduate School of Education in Nazarbayev University. I am conducting a research study on "Teachers' understanding of Action Research in one of the specialized schools in Kazakhstan".

The purpose of this research is to explore teachers' understanding of the notion and concept of action research, the way they conceptualize and implement action research as a way to improve their teaching practice. The research will also look into the challenges teachers encounter in conducting action research in their school, the reasons why those challenges occur and how they cope with them.

I invite your school to participate in this research. This is a wonderful opportunity for schoolteachers to reflect on and share their experiences of doing action research and how they feel about it. It will also be helpful for the school leadership to know about teachers' views and reflections on doing action research and the way it (action research) helps them improve their practices. By participating in this study, the teachers, who are action research practitioners, will become better aware of action research practices, and expand their understanding of how to incorporate action research into their teaching practice so that it will serve them as a tool for professional development. Moreover, schoolteachers will be able to share the challenges they encounter while doing their research, the steps they take to cope with them, and find out the roots of those challenges.

Participation in this study involves one individual interview of about 45-60 minutes with seven teachers and three moderators, two observations of each action research group meetings and action research course sessions, and analysis of some reports and articles

written by the teachers and course plans compiled by moderators. I assure you that the

purpose of interviews and observation is not to evaluate or judge the teachers' and course

moderators' performance, but to explore their views, reflections and experiences of doing

action research and learn from those.

All the information collected from the participants will be treated in the strictest

confidence, and neither the school nor participants will be identifiable in any reports or

presentation from this study. Participants may withdraw from the study at any time without

any penalty. The participation of the school is voluntary and you as the School Principal

may decide to withdraw your participation at any time without giving any reason.

Once I have received your consent/permission to approach teachers and course moderators

to participate in the study, I will obtain informed consent from the participants.

If you have any query or require more information about the study, please contact

me at +7000000000.

After giving your permission for the study, if you are not satisfied with how this

study would be conducted, or if you would have any concerns about the research or your

rights as a participant, you can please contact my Thesis Supervisor at +70000000 or write

to NUGSE Research Committee at email: --------------------------

Invitation for the teachers to participate in research study

My name is ………………………….., and I am a Master degree student at Graduate School of Education in Nazarbayev University. I am conducting a research study on "Teachers' understanding of Action Research in one of the specialized schools in Kazakhstan".

The purpose of this research is to explore teachers' understanding of the notion and concept of action research, the way they conceptualize and implement action research as a way to improve their teaching practice. The research will also look into the challenges teachers encounter in conducting action research in their school, the reasons why those challenges occur and how they cope with them.

I invite you to participate in this research by giving a face-to-face interview. This is a wonderful opportunity for you to reflect on and share your experiences of doing action research and how you feel about it. It will also be helpful for the school leadership to know about your views and reflections on doing action research and the way it (action research) helps you improve your practices. Moreover, you will be able to share the challenges you encounter while doing action research, the steps you take to cope with them, and seek the roots of those challenges.

Upon completion of the research, you will become better aware of action research practices, and expand your understanding of how to incorporate action research into your teaching practice so that it will serve you as a tool for professional development. You will be provided with the results of the research as well.

Your participation in this study involves one individual interview of about 45-60 minutes and two group meeting observations. I assure you that the purpose of the interview and observations is not to evaluate or judge your performance, but to explore your views, reflections and experiences of doing action research and learn from those. The interview

will be held in the locked room inside the school, or in any other location outside the

school, which is convenient for you. We will also agree on the convenient time for you to

meet and have an interview.

All the information collected from you will be treated in the strictest confidence,

and neither the school nor you will be identifiable in any reports or presentation from this

study. You may withdraw from the study at any time without any penalty. Your

participation is completely voluntary and you may decide to withdraw your participation at

any time without giving any reason.

Once I have received your consent/permission to participate in the study, I will

obtain informed consent from you.

If you have any query or require more information about the study, please contact

me at +7000000000.

After giving your permission for the study, if you are not satisfied with how this

study would be conducted, or if you would have any concerns about the research or your

rights as a participant, you can please contact my Thesis Supervisor at +70000000 or write

to NUGSE Research Committee at email: --------------------------

Мектеп директорына арналған зерттеу жұмысына қатысуға шақыру хаты

Құрметті директор,

Менің атым ………………………….., және мен Назарбаев Университетіндегі Жоғары Білім беру мектебінің магистратура студентімін. "Қазақстандағы мамандандырылған мектептердің біріндегі мұғалімдердің іс-әрекеттегі зерттеу туралы түсінігі" тақырыбында зерттеу жүргізіп жатырмын. Зерттеу жұмысының мақсаты мұғалімдердің іс-әрекеттегі зерттеу ұғымы туралы түсінігін анықтау, олардың оқыту тәжірибесін жақсарту құралы ретінде іс-әрекеттегі зерттеуді жүзеге асырып, жүргізудегі әрекеттерін қарастыру. Сонымен қатар, іс-әрекеттегі зерттеу жүргізу барысында мұғалімдердің кездесетін қиындықтары, олардың туындау себептері және мұғалімдердің сол қиындықтармен күресу жолдары зерттеледі.

Мен Сіздің мектебіңізді осы зерттеу жұмысына қатысуға шақырамын. Бұл мектеп мұғалімдері үшін өте жақсы мүмкіндік, себебі олар іс-әрекеттегі зерттеуді жүргізудегі тәжірибесі туралы ой бөліседі. Ал мектеп әкімшілігі мұғалімдердің іс-әрекеттегі зерттеуді жүргізудегі ойлары мен көзқарастарымен танысып, осы зерттеудің олардың оқыту тәжірибесін жақсарудағы ықпалын көреді. Берілген зерттеу жұмысына қатысу арқылы практик-мұғалімдер іс-әрекеттегі зерттеу туралы білімдерін толықтырып, оны өздерінің кәсіби дамуында нәтижелі түрде пайдалану жолдары туралы мағлұмат алады. Сонымен қатар, мектеп мұғалімдері іс-әрекеттегі зерттеу жүргізуде кездесетін қиындықтары және олармен күресу жолдары туралы ой бөлісіп, сол қиындықтардың шығу себептерін анықтайды.

Зерттеу жұмысы барысында жеті мектеп мұғалімі мен үш курс модераторы ұзақтығы 45-60 минут болатын бетпе-бет интервьюге қатысады. Зерттеуші практик-мұғалімдердің екі топтық кездесулері мен екі курс сессияларына қатысады, және

мұғалімдердің жарияланған мақалалары мен модераторлардың жұмыс жоспарларына талдау жасайды. Мен интервью мен бақылаудың мақсаты мұғалімдердің және курс модераторлардың жасап жатқан қызметін бағалау немесе сынау емес, тек олардың көзқарастары мен тәжірибелерін зерттеп, олардан үйрену екендігіне кепілдік беремін.

Зерттеу жұмысына қатысушылардан жиналған барлық ақпарат жоғары деңгейдегі құпиялылықта сақталады, ешбір есеп немесе презентация кезінде мектептің де, қатысушылардың да аттары анықталмайды. Қатысушыларға еш айыппұлсыз зерттеу жұмысына қатысу туралы келісімдерін қайтаруға немесе тоқтатуына болады. Мектептің қатысуы ерікті түрде және Сіз, мектеп директоры ретінде, ешбір себепсіз қатысу туралы келісімді кері қайтаруыңызға болады. Сіздің зерттеу жұмысына қатысуға келісіміңізді/рұқсатыңызды алғаннан кейін мектеп мұғалімдері мен курс модераторларынан зерттеу жұмысына қатысуға келісім формасына қол қоюларын сұраймын.

Егер зерттеу жұмысы туралы қосымша ақпарат алғыңыз келсе немесе сұрақтарыңыз болса, маған +7000000000 номеріне хабарласыңыз.

Зерттеу жұмысына қатысуға келісім бергеннен кейін, осы зерттеудің жүргізілу барысына көңіліңіз толмаған жағдайда, немесе қатысушы ретінде мәселелер туындаса, менің ғылыми жетекшіме +70000000 номеріне хабарласып, немесе ------------------------- электрондық поштасы арқылы Назарбаев Университеті Жоғары Білім беру мектебінің Зерттеу Комитетіне хат жазсаңыз болады.

Мұғалімдерге арналған зерттеу жұмысына қатысуға шақыру хаты

Құрметті _____,

Менің атым ……………………………., және мен Назарбаев Университетіндегі Жоғары Білім беру мектебінің магистратура студентімін. "Қазақстандағы мамандандырылған мектептердің біріндегі мұғалімдердің іс-әрекеттегі зерттеу туралы түсінігі" тақырыбында зерттеу жүргізіп жатырмын. Зерттеу жұмысының мақсаты мұғалімдердің іс-әрекеттегі зерттеу ұғымы туралы түсінігін анықтау, олардың оқыту тәжірибесін жақсарту құралы ретінде іс-әрекеттегі зерттеуді жүзеге асырып, жүргізудегі әрекеттерін қарастыру. Сонымен қатар, іс-әрекеттегі зерттеу жүргізу барысында мұғалімдердің кездесетін қиындықтары, олардың туындау себептері және мұғалімдердің сол қиындықтармен күресу жолдары зерттеледі.

Мен Сізді бетпе-бет интервьюге қатысуға шақырамын. Бұл Сіз үшін өте жақсы мүмкіндік, себебі Сіз іс-әрекеттегі зерттеуді жүргізудегі тәжірибеңіз туралы ойыңызбен бөлісе аласыз. Ал мектеп әкімшілігі мұғалімдердің іс-әрекеттегі зерттеуді жүргізудегі ойлары мен көзқарастарымен танысып, осы зерттеудің олардың оқыту тәжірибесін жақсарудағы ықпалын көреді. Сонымен қатар, Сіз іс-әрекеттегі зерттеу жүргізуде кездесетін қиындықтарыңыз және олармен күресу жолдары туралы ой бөлісіп, сол қиындықтардың шығу себептерін анықтай аласыз.

Зерттеу жұмысы аяқталған соң, Сіз іс-әрекеттегі зерттеу туралы біліміңізді толықтырып, оны өзіңіздің кәсіби дамуыңызда нәтижелі түрде пайдалану жолдары туралы мағлұмат аласыз. Мен Сізді зерттеу жұмысының нәтижелерімен таныстырамын.

Зерттеу барысында Сіз ұзақтығы 45-60 минут болатын бетпе-бет интервьюге қатысасыз. Мен Сіздің мұғалімдермен ұйымдастыратын топтық кездесулеріңізді

бақылаймын. Кездесуді бақылау саны-екеу. Мен интервью және бақылаудың

мақсаты Сіздің қызметіңізді бағалау немесе сынау емес, тек көзқарастарыңыз мен

тәжірибеңізді зерттеп, олардан үйрену екендігіне кепілдік беремін. Интервью мектеп

ішіндегі кілттелген бөлмеде өтеді, немесе өзіңіздің ыңғайыңызға қарай мектептен

тыс кез келген жерде жүргізіледі. Біз интервьюді жүргізуге қолайлы уақытты бірге

белгілейміз.

Сіз берген барлық ақпарат жоғары деңгейдегі құпиялылықта сақталады,

ешбір есеп немесе презентация кезінде мектептің де, қатысушының да аттары

анықталмайды. Сізге еш айыппұлсыз зерттеу жұмысына қатысу туралы келісімді

қайтаруға немесе тоқтатуға болады. Сіздің қатысуыңыз ерікті түрде және Сіз ешбір

себепсіз қатысу туралы келісімді кері қайтаруыңызға болады.

Сізден зерттеу жұмысына қатысуға келісіміңізді/рұқсатыңызды алғаннан

кейін, мен Сізден зерттеу жұмысына қатысуға келісім формасына қол қоюыңызды

сұраймын.

Егер зерттеу жұмысы туралы қосымша ақпарат алғыңыз келсе немесе

сұрақтарыңыз болса, маған +7000000000 номеріне хабарласыңыз.

Зерттеу жұмысына қатысуға келісім бергеннен кейін, осы зерттеудің

жүргізілу барысына көңіліңіз толмаған жағдайда, немесе қатысушы ретінде

мәселелер туындаса, менің ғылыми жетекшіме +70000000 номеріне хабарласып,

немесе ------------------------- электрондық поштасы арқылы Назарбаев Университеті

Жоғары Білім беру мектебінің Зерттеу Комитетіне хат жазсаңыз болады.

Appendix B

Informed Consent Form for Teachers (Interview)

DESCRIPTION: You are invited to voluntarily take part in the research study conducted

by ======== on "understanding how teachers of one of the selected schools in

Kazakhstan conceptualize and implement action research as a tool to improve their

teaching practice". In addition, this study will investigate the challenges the schoolteachers

confront while conducting their research, the reasons why they occur and the strategies

they use to address those challenges.

TIME INVOLVEMENT: The participation in this research involves one individual semi-

structured interview, which will take place in the location and place most convenient for

you. The interview will last for approximately 45-60 minutes. A follow up interview may

be held in case I have some more questions to explore and clarify. You will be asked

questions regarding your understanding of the concept of action research, the overall

experience of doing action research, as well as the challenges you encounter, why the

challenges arise and the ways you address them. If you permit, the interview will be audio

recorded. The interviews will take place between November of 2018 and January of 2019.

RISKS AND BENEFITS: There are no known risks for you to participate in this study.

The only little risk is that you may feel uncomfortable or little stressed while responding to

some questions. In this case you can skip the question you do not want to answer. I assure

you that whatever you say in the interview will be completely confidential. In addition,

you may stop the interview or withdraw from the research at any time without giving any

reasons. Your participation in the study will not have any negative results for your work,

your employment and relationships in your school.

The expected benefits associated with your participation will be your better

comprehension of the notion of action research, and implementation of action research as a

way to improve your teaching practice. The information about the view held by you about action research will help the school leadership develop a shared understanding about, and approach to action research. Moreover, your responses will help identify what challenges are encountered in conducting action research, as well as seek the ways of combating those challenges. At the end of the research you will be provided with a short summary of the study and recommendation on how to take advantage of action research to improve your teaching practice.

COMPENSATION: There is no payment and other direct benefits given to those participating in the study. A copy of the research results will be available by the end of the study.

CONFIDENTIALITY AND PRIVACY: You will be provided with a written consent form, which guarantees confidentiality of your responses and anonymity of your name and research site from others. Your name will be coded. The school and the city where it is located will not be named.

All the interview recordings and transcripts will be kept in two separate special folders on my personal laptop and protected with a password. The paper notes will be retained in the locked drawer of the researcher. To make you certain that your replies will not do any harm to your further work in the school, the school administration will not be told your name under no circumstances. Private interviews will be held in the classroom locked inside, so that extraneous people will not interfere. If you do not want to give an interview inside the school, another location will be chosen.

The interview notes and transcripts will not contain your name or any hints that will help identify your personality. Similarly, the research report and any publication and conference presentation from the study will not reveal your name and the school. Only

codes or pseudonyms will be used. The interview tapes and transcripts will be destroyed after the study is completed.

The researcher will NOT discuss anything about the interview with anyone in and outside the school and you are requested to do the same.

PARTICIPANT'S RIGHTS: As your participation in this research study is voluntary, you can withdraw at any time without giving a reason or refuse to answer any question without any consequences of any kind. Your withdrawal will not affect your relationship with the researcher and your employer. If you withdraw from the study before data collection is completed, I ensure that your data will be returned to you or destroyed.

POINTS OF CONTACT: If you have any query or require more information about the study, please contact me at +7000000000.

After giving your permission for the study, if you are not satisfied with how this study would be conducted, or if you would have any concerns about the research or your rights as a participant, you can please contact my Thesis Supervisor at +70000000 or write to NUGSE Research Committee at email: --------------------------

STATEMENT OF CONTACT:

Please check all that apply and sign this consent form if you agree to voluntarily participate in this study.

I,_____, have carefully read the information provided. I understand that my participation in this study is voluntary. I can at any time withdraw my consent, and this will not have any negative consequences for me personally and for my school. I understand that the information collected during this study will be treated confidentially.

Therefore:

- [   ] I agree to participate in this study at my own free will

•   [   ] I give permission for the interview data to be included in the research report,

publications, and presentations resulting from this study but without using my personal

and my school's actual name:

Research Participant's Signature: _____ Date: _____

Researcher's Signature: _____ Date: _____

Consent for Audio-recording of Interview:

•   [   ] I give permission for my interview to be audio-recorded

•   [   ] I do not give permission for my interview to be recorded

Research Participant's Signature _____

Date_____

Мұғалімдерге арналған зерттеу жұмысы келісімінің ақпараттық формасы

(Интервью)

СИПАТТАМА: Сіз ерікті түрде "Қазақстандағы мамандандырылған мектептердің біріндегі мұғалімдердің іс-әрекеттегі зерттеу туралы түсінігі және олардың іс-әрекеттегі зерттеуді жүргізу тәжірибесі туралы" зерттеу жұмысына қатысуға шақырылып отырсыз. Сонымен қатар, іс-әрекеттегі зерттеу жүргізу барысында мектеп мұғалімдерінің кездесетін қиындықтары, қиындақтардың туындау себептері және мұғалімдердің олармен күресуде пайдаланатын әдістері зерттеледі.

ӨТКІЗІЛЕТІН УАҚЫТЫ: Сіз бетпе-бет өткізілетін жартылай құрылымдалған интервьюға қатысасыз. Интервью өзіңізге ыңғайлы жерде өткізіледі. Интервью шамамен 45-60 минут уақытыңызды алады. Менде қосымша сұрақтар туындаған жағдайда қосымша интервью өткізіледі. Сізге іс-әрекеттегі зерттеу курсының мазмұны мен жүргізілуі, зерттеу жүргізудегі тәжірибеңіз, зерттеу жүргізу барысында мұғалімдерде туындайтын қиындықтар, олардың шығу себептері мен жою жолдары туралы сұрақтар қойылады. Егер рұқсат етсеңіз, интервью үнтаспаға жазылады. Интервью 2018 жылдың қараша айы мен 2019 жылдың қаңтар айы аралығында жүргізіледі.

ЗЕРТТЕУ ЖҰМЫСЫНА ҚАТЫСУДЫҢ ҚАУІПТЕРІ МЕН

АРТЫҚШЫЛЫҚТАРЫ: Зерттеу жұмысына қатысуда еш қауіп жоқ. Тек кейбір сұрақтарға жауап беру кезінде өзіңізді қолайсыз немесе ыңғайсыз сезінуіңіз мүмкін. Мұндай жағдайда сұраққа жауап бермеуіңізге болады. Мен Сіздің берген ақпаратыңыз толығымен құпия түрде сақталатынына кепілдік беремін. Сонымен қатар, кез келген уақытта түсініктемесіз интервьюді тоқтатуға немесе оған қатысудан бас тартуға болады. Сіздің зерттеуге қатысуыңыз жұмысыңызға және мектептегі қарым-қатынастарыңызға ешқандай кері әсерін тигізбейді.

Зерттеу жұмысына қатысуыңыздың келесідей артықшылықтары бар: іс-әрекеттегі зерттеу ұғымы туралы түсінігіңіз кеңейіп және оны жүргізудегі тәжірибеңіз молаяды. Сіздің айтқан ойларыңыз бен көзқарастарыңыз мұғалімдер арасында іс-әрекеттегі зерттеу туралы бірдей түсінік қалыптастыруда көмегін тигізеді. Сонымен қатар, Сіздің жауаптарыңыз іс-әрекеттегі зерттеу жүргізудегі қиындықтарды анықтап, оларды жою жолдарын іздестіруге септігін тигізеді. Зерттеудің соңында Сіз зерттеу жұмысының қысқаша баяндамасымен танысып, іс-әрекеттегі зерттеуді жүргізудегі тәжірибені жақсартуға бағытталған ұсыныстар аласыз.

ӨТЕМАҚЫ: Зерттеуге қатысушыларға ешқандай төлемақы берілмейді. Сізге зерттеу соңында зерттеу жұмысының нәтижелерінің бір көшірмесі беріледі.

ҚҰПИЯЛЫЛЫҚ: Сізге зерттеу жұмысына қатысуға келісім формасы беріледі. Бұл келісім формасы Сіздің жауаптарыңыздың құпиялылығы мен Сіздің есіміңіз бен мектебіңіздің құпиялылығын қамтамасыз етеді. Сіздің есіміңізге код беріледі. Мектеп және ол орналасқан қала еш жерде аталмайды.

Барлық интервью жазбалары мен транскрипттері менің ноутбугімдегі екі бөлек файлда сақталып, құпиясөзбен қорғалады. Қағаз жазбалар зерттеушінің үстеліндегі кілттелген тартпада сақталады. Сіздің жауаптарыңыздың мектептегі жұмысыңызға зиян тигізбеуін қамтамасыз ету мақсатында ешқандай жағдайда мектеп әкімшілігіне Сіздің есіміңіз аталмайды. Бетпе-бет интервьюлер іштен кілттелген сынып бөлмелерінде өткізіледі. Егер интервьюді мектеп ішінде бергіңіз келмесе, интервью өткізілетін басқа орын таңдалады.

Интервью жазбалары мен транскрипттерінде Сіздің есіміңіз немесе есіміңізді анықтайтын еш белгі болмайды. Зерттеу жұмысының негізінде жазылған баяндамаларда және конференцияларда жасалатын презентацияларда Сіздің есіміңіз

бен мектебіңіз айтылмайды. Тек кодтар мен лақап есімдер қолданылады. Интервью жазбалары мен транскрипттері зерттеу жұмысы аяқталған соң толығымен жойылады.

Зерттеуші интервьюді мектеп ішінде және мектептен тыс жерде ешкіммен талқыламайды және Сізден де талқыламауды өтінеді.

ҚАТЫСУШЫНЫҢ ҚҰҚЫҚТАРЫ: Сіздің зерттеуге қатысуыңыз ерікті болғандықтан, Сізге кез келген уақытта еш түсініктемесіз және еш салдарсыз зерттеу жұмысына қатысудан немесе интервью сұрақтарына жауап беруден бас тартуыңызға болады. Сіздің зерттеуден бас тартуыңыз Сіздің зерттеуші мен жұмыс берушіңіздің араңыздағы қарым- қатынасқа еш әсерін тигізбейді. Егер Сіз зерттеу жұмысына қатысудан мәлімет жинау үдерісі аяқталамын дегенше бас тартсаңыз, Сіздің берген мәліметіңіз өзіңізге қайтарылатынына немесе жойылатынына кепілдік беремін.

БАЙЛАНЫС АҚПАРАТЫ: Егер зерттеу жұмысы туралы қосымша ақпарат алғыңыз келсе немесе сұрақтарыңыз болса, маған +7000000000 номеріне хабарласыңыз.

Зерттеу жұмысына қатысуға келісім бергеннен кейін, осы зерттеудің жүргізілу барысына көңіліңіз толмаған жағдайда, немесе қатысушы ретінде мәселелер туындаса, менің ғылыми жетекшіме +70000000 номеріне хабарласып, немесе ------------------------- электрондық поштасы арқылы Назарбаев Университеті Жоғары Білім беру мектебінің Зерттеу Комитетіне хат жазсаңыз болады.

БАЙЛАНЫСТЫ БЕКІТУ: Келісім формасында берілген ақпаратты оқып, зерттеу жұмысына ерікті түрде қатысуға келіссеңіз, осы келісім формасына қол қоюыңызды өтінемін.

Мен,_____, берілген ақпаратты толығымен оқып шықтым. Менің зерттеуге қатысуымның ерікті түрде екенін түсінемін. Мен кез

келген уақытта өз келісімімді кері қайтара аламын, және бұл маған және менің мектебіме ешқандай кері әсерін тигізбейді. Мен осы зерттеу жұмысы барысында жиналған мәліметтің құпия түрде сақталатынын түсінемін. Сондықтан:

- [   ] Мен ерікті түрде осы зерттеуге қатысуға келісемін

- [   ] Мен зерттеу баяндамасына, мақалаларға және презентацияларға интервьюде берген ақпаратымның енгізілуіне рұқсатымды беремін, алайда менің есімім және мектебімнің аты жазылмайды немесе аталмайды.

Зерттеуге қатысушының қолы: _____ Күні: _____

Зерттеушінің қолы: _____ Күні: _____

Интервьюді үнтаспаға жазуға келісім:

- [   ] Мен интервьюді үнтаспаға жазуға келісім беремін

- [   ] Мен интервьюді үнтаспаға жазуға келісім бермеймін.

Зерттеуге қатысушының қолы: _____ Күні: _____

Appendix C

Samples of interview questions for teachers

Date:

Time:

Venue:

Interviewee Code:

Position of the interviewee: teacher

After introducing herself, the researcher articulates the purpose of the study, the measures ensuring the confidentiality of the interviewee and the approximate time of the interview. The researcher reminds the interviewee about recording the interview. The interviewee is free to ask questions before the interview starts.

Interview Questions:

Questions about teacher's first involvement in action research:

1.When did you take up action research?

2.How did you first become involved in action research? Who or what influenced your decision about your first participation in action research?

3.Where did you first learn about the stages of action research?

Questions about teacher's understanding of the concept and significance of action research:

4. How would you explain the notion of action research to a novice teacher?

5. What is your purpose of your conducting action research?

6. Do you conduct action research on your own or with your colleagues? Why?

7. How often do you meet with your colleagues to plan, reflect and solve issues?

Questions about designing and implementation of action research:

8.What steps do you follow in conducting action research?

9. How do you see the cycles of action research? Do you always follow these cycles?

Why?

10. How do you share and communicate the results?

Questions about challenges the teacher faces and ways of coping with them:

11. What do you find the most difficult while doing action research? Why do you think

these difficulties emerge?

12. What do you do to alleviate those difficulties?

Samples of interview questions for course moderators

Date:

Time:

Venue:

Interviewee Code:

Position of the interviewee: course moderator

After introducing herself, the researcher articulates the purpose of the study, the measures ensuring the confidentiality of the interviewee and the approximate time of the interview. The researcher reminds the interviewee about recording the interview. The interviewee is free to ask questions before the interview starts.

Interview Questions:

Questions about course moderator's first involvement in conducting an action research course:

1.When did you take up action research?

2.How did you first become involved in conducting action research courses?

3.Who or what influenced your decision about your becoming an action research course moderator?

4. What is the purpose of your conducting action research courses?

Questions about designing and implementation of action research:

5. To what extent are you satisfied with the content and delivery of action research courses?

6.Do you think the participant teachers follow the action research cycle and all the action research stages while doing research?

7. What are the teachers able to do upon completion of the courses?

Questions about the action research course benefits and teacher's attitudes towards the courses:

8. In your opinion, what benefits can teachers gain while being engaged in your action research courses?

9. Why do you think teachers enrol in your courses? Do they show interest in doing action research? In your opinion, are there teachers who come to your courses just to "kill time"?

Questions about challenges the teacher faces and ways of coping with them:

10. In your opinion, what challenges do teachers encounter while doing action research? Why do you think those challenges emerge?

11. What do you usually do to alleviate those difficulties?

Мұғалімдерге арналған интервью сұрақтарының үлгілері

Күні:

Уақыты:

Өтетін жері:

Интервью берушінің коды:

Интервью берушінің қызметі: мұғалім

Өзін таныстырғаннан кейін, зерттеуші интервью берушіні зерттеудің мақсатымен, қатысушының құпиялылығын сақтаудағы әрекеттермен және интервьюді өткізуге кететін уақыт мөлшерімен таныстырады. Зерттеуші интервью берушіге интервьюдің диктофонға жазылатындығын ескертеді. Интервью басталмас бұрын, интервью беруші сұрақтар қоя алады.

Интервью сұрақтары:

Мұғалімдердің іс-әрекеттегі зерттеумен алғаш айналыса бастаудағы тәжірибесі туралы сұрақтар:

1. Іс-әрекеттегі зерттеумен қашан айналыса бастадыңыз?

2. Іс-әрекеттегі зерттеумен қалай айналыса бастадыңыз? Іс-әрекеттегі зерттеумен айналысу туралы шешіміңізге кім немесе не әсер етті?

3. Іс-әрекеттегі зерттеудің кезеңдері (этаптары) туралы қайдан үйрендіңіз?

Мұғалімдердің іс-әрекеттегі зерттеу туралы түсінігі және іс-әрекеттегі зерттеудің маңыздылығы туралы сұрақтар:

4. Іс-әрекеттегі зерттеу ұғымын жаңадан келген мұғалімге қалай түсіндірер едіңіз?

5. Іс-әрекеттегі зерттеу жүргізудегі сіздің мақсатыңыз қандай?

6. Сіз іс-әрекеттегі зерттеуді өзіңіз жүргізесіз бе, әлде әріптестеріңізбен жүргізесіз бе? Неге?

7. Жоспарлау, рефлексия жасау және мәселелерді шешу үшін әріптестеріңізбен қаншалықты жиі кездесесіз?

Мұғалімдердің іс-әрекеттегі зерттеуді жүзеге асыруы және жүргізуі туралы сұрақтар:

8. Іс-әрекеттегі зерттеу жүргізуде қандай әрекеттер (қадамдар) жасайсыз?

9. Іс-әрекеттегі зерттеуді жүргізудегі циклдер қандай? Сіз осы циклдер бойынша жұмыс жүргізесіз бе? Неге?

10. Зерттеу нәтижелерімен қалай бөлісесіз және оларды қалай таратасыз?

Мұғалімдердің іс-әрекеттегі зерттеуді жүргізуде кездесетін қиындықтары және олармен күресу жолдары туралы сұрақтар:

11. Іс-әрекеттегі зерттеуді жүргізуде Сіз үшін ең қиын нәрсе не? Бұл қиындықтардың туындау себебі неде деп ойлайсыз?

12. Осы қиындықтармен күресу үшін қандай әрекеттер жасайсыз?

Курс модераторларына арналған интервью сұрақтарының үлгілері

Күні:

Уақыты:

Өтетін жері:

Интервью берушінің коды:

Интервью берушінің қызметі: курс модераторы

Өзін таныстырғаннан кейін, зерттеуші интервью берушіні зерттеудің мақсатымен, қатысушының құпиялылығын сақтаудағы әрекеттермен және интервьюді өткізуге кететін уақыт мөлшерімен таныстырады. Зерттеуші интервью берушіге интервьюдің диктофонға жазылатындығын ескертеді. Интервью басталмас бұрын, интервью беруші сұрақтар қоя алады.

Интервью сұрақтары:

Курс модераторларының іс-әрекеттегі зерттеумен алғаш айналыса бастаудағы тәжірибесі туралы сұрақтар:

1.Іс-әрекеттегі зерттеумен қашан айналыса бастадыңыз?

2.Іс-әрекеттегі зерттеумен қалай айналыса бастадыңыз?

3.Мектепішілік іс-әрекеттегі зерттеу курсының модераторы атануы туралы шешіміңізге кім немесе не әсер етті?

4. Іс-әрекеттегі зерттеу курсын жүргізудегі сіздің мақсатыңыз қандай?

Мұғалімдердің іс-әрекеттегі зерттеуді жүзеге асыруы және жүргізуі туралы сұрақтар:

5. Іс-әрекеттегі зерттеу курстарының мазмұнына және өткізілу барысына қаншалықты деңгейде көңіліңіз толады?

6. Сіздің ойыңызша, зерттеу жүргізу барысында курсқа қатысушы мұғалімдер іс-әрекеттегі зерттеу жүргізудегі циклды және барлық зерттеу кезеңдерін (этаптарын) сақтайды ма?

7. Курсты аяқтағаннан кейін мұғалімдер не істеуге қабілетті?

Іс-әрекеттегі зерттеу курсының басымдылықтары (артықшылықтары) және курсқа деген мұғалімнің қарым-қатынасы туралы сұрақтар:

8. Сіздің ойыңызша, іс-әрекеттегі зерттеу курсына қатысудың мұғалімдерге қандай пайдалы жақтары бар?

9. Мұғалімдер Сіздің курсқа неге жазылады деп ойлайсыз? Олар іс-әрекеттегі зерттеуді жүргізуге қызығушылық танытады ма? Сіздің ойыңызша, курсқа тек уақыт өткізу үшін келетін мұғалімдер бар ма?

Мұғалімдердің іс-әрекеттегі зерттеуді жүргізуде кездесетін қиындықтары және олармен күресу жолдары туралы сұрақтар:

10. Сіздің ойыңызша, іс-әрекеттегі зерттеу жүргізуде мұғалімдер қандай қиындықтарға тап болады? Бұл қиындықтардың туындау себебі неде деп ойлайсыз?

11. Мұғалімдер осы қиындықтарды жеңу үшін әдетте қандай әрекеттер жасайды?

Appendix D

OBSERVATION PROTOCOL

Observation Focus: school-based action research course sessions conducted by

moderators/ teachers' group meetings

Date: _____

Length of observation: _____

Setting: _____

Participants: _____

Observation Field Notes	Researcher's Notes
The agenda of the course	
Issues addressed during the course	
Questions raised by the teachers	
The way the questions were addressed and responded	
Further Planning	

Strengths Observed:

Challenges Observed:

Appendix E

DOCUMENT ANALYSIS CHECKLIST

Document Analysis Focus: articles/reports written by teachers, which present action research results

Date: _____

Rubrics	Yes/No	Researcher's Notes
The report/article has a clear research topic.		
Research questions are fully related to the research topic.		
The purpose of the action research is stated.		
The writer demonstrates good knowledge of the topic and refers to the literature he/she has read.		
An explicit explanation of data collection methods (interviews, surveys, etc) is provided.		
Triangulation is used to enhance the validity and reliability of the findings.		
The interpretation of data is present.		
The researcher represents the data in various forms (i.e. diagrams, tables, charts, etc).		

Actions (and modified actions) taken for tackling the researched issue are explained.		
The research findings correlate with research questions, answering each of them.		
The list of literature used is given at the end of the article.		
The researcher maintains all the action research stages.		
Any additional information		

Strengths Identified:

Challenges Identified:

DOCUMENT ANALYSIS CHECKLIST

Document Analysis Focus: the course plan of the moderators

Date: _____

Rubrics	Yes/No	Researcher's Notes
The plan assists teachers with creating their research topic.		
The plan assists teachers with constructing research questions in accordance with the research topic.		
The plan assists teachers with designing the purpose of the research.		
The plan introduces teachers with action research cycle and action research stages.		
The plan assists teachers with reviewing the relevant literature.		
The plan provides teachers with information about data collection methods (interviews, surveys, etc).		
The plan informs teachers about the validity and reliability of the research, explaining the notion of triangulation.		
The plan assists teachers with interpreting data.		
The plan informs teachers about planning actions, and taking actions.		

The plan informs teachers about reflecting on actions, and introduces the reflection tools (e.g.diaries).		
Any additional information		

Strengths Identified:

Challenges Identified: