Participatory Action Research to Develop the Teachers on Classroom Action Research

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Abstract
This research is proposed 1) to investigate status state, problems, and needs in doing classroom action research of teachers, 2) to guideline the development of classroom action research of teachers, and 3) to monitor and evaluation the guideline of classroom action research development of teachers. Sampling were 8 teachers of Wat Wangyang School under Nakhon Sawan Primary Educational Service Office Area 1 which came from purposive method. This research was mixed research method and conducted during June 2021 to April 2022 by Participatory Action Research (PAR) in 4 steps: Planning, Action, Monitoring and Reflection. Tools used in data collection were status state, problems, and needs in doing classroom action research questionnaire of teachers; structured interview form; supervision, monitoring record and evaluation form of classroom action research; classroom action research test; and classroom action research evaluation form. Analysis of quantitative data used Percentage, Mean, and Standard Deviation. Analysis of qualitative data used descriptive statistics.

Research found that, 1) teachers of Wat Wangyang School have status state in classroom action research in bottom level, have highest level in problems and needs, 2) the guideline of classroom action research development of teachers of Wat Wangyang School showed that 2.1) to organized the workshop training in formal 5 Chapters of classroom action research by scholar with experienced in classroom research, 2.2) teachers are conducting classroom action research follow the research steps, and) monitoring and evaluating the guideline of classroom action research found that teachers have better understanding in classroom in post workshop than before workshop and have 8 classroom action research with high quality of work.

Keywords: Participatory Action Research, Classroom Action Research

Introduction
Teacher development become research teachers is one of the roles of modern teachers who are very important in developing students according to the curriculum’s expectations. Teachers and researchers inevitably bring research as part of teaching and learning management. That is, when there is a problem with students or learning management processes in the classroom or others. Teachers will need to search for the real cause of the problem, seeking guidelines, making principles, finding methods or techniques for being used in problem solving, doing action plan to solve problems execution according to the plan monitoring and evaluating to make improvements until both teachers and students are satisfied. This kind of research is called “Classroom Research” (Ritcharoon, 2021).

Classroom action research or classroom research plays an important role and importance in educational management because it creates a body of knowledge to develop people to be complete human beings which knowledge gained from research can be used to develop and make decisions in planning and management process of education (Ritcharoon, 2021). It can be said that research is the heart of education development. However, in reality, the development of teachers in classroom research is not successful because teachers themselves have full-time jobs and have less time to do research or lack of motivation for work.
The reason why the development of research teachers in the classroom is not as successful as it should be. But if teachers consider with understanding the important stages of research and realize the benefits that will come to the development of students’ learning, which will enable teachers to solve problems for students as well. It does not increase the burden of teaching in any way, but there must be a process and procedure for conducting research and applying the results from research to develop teaching and learning so that learners can develop themselves according to their full potential based on their own aptitudes and interests.

Kemmis & Mc Taggart (1988) defines action research as a form of research that is not technically different from other research but differs in methodology which the methodology is work that reflects the performance of self-reflection coils (Spiral of Self-Reflecting) starting at the planning, action, observation, and reflection which is a research that requires participants to reflect on the process of practice in order to improve work. The aim of action research is to improve the efficiency and the effectiveness of routine work is improved by taking the work that is being performed to analyze the problem conditions that cause that work to not be as successful as it should be. In addition, theoretical concepts and experience from past practice must be used to search for information and methods that are expected to solve such problems, then reflect such methods to try on groups related to that problem.

Action research process according to the concept of Kemmis & McTaggart (1988) consists of four main research activities: 1) planning for better change (planning), 2) action according to the plan (action), 3) observation, and 4) reflection the process and effect of the change and improve the operational plan (re-planning) by continuing to do this as shown in the details in Figure 1.

![Fig 1 Kemmis & McTaggart’s Cycle of Action Research](http://www.shanlaxjournals.com)
development. This is an important strategy for developing learners to achieve quality according to the educational standards that the school aims for (Erawan, 2002; Srisa-ard, 2010; Chaisriha, 2010). From the background and information, the researcher is therefore interested in developing teachers who are school personnel to have knowledge, understanding and ability to use the research process in the classroom to manage teaching and learning to solve problems or develop student learning as well as to develop the teaching and learning management of teachers to be effective which will result in the management of quality education in the future.

**Research Objectives**

The main objectives of this research were to develop teachers in classroom research using participatory action research with specific objectives as follows.

- To investigate status state, problems, and needs in doing classroom research of teachers,
- To guideline the development of classroom research of teachers, and
- To monitor and evaluation the guideline of classroom research development of teachers.

**Scope of Research and Methodology**

**Scope of Research**

Participatory Action Research to develop teachers in classroom research is used. The researcher defined the scope of teacher development in 3 directions: 1) teacher development workshop in classroom research, 2) self-development of research participants during classroom research, and 3) internal supervision by a group of supervisors who have knowledge and understanding of conducting research in the classroom.

**Methodology**

This research used a Participatory Action Research: PAR from those who are involved in the development of teachers in classroom research such as school administrator and teachers by following the concept of Participatory Action Research of Kemmis and McTaggart (2011) which consisted of 4 steps:
Step 1: Plan

- Meeting of teachers to present the principle of informing the research objectives, the research process, and the benefits that will be obtained from the research to the teachers.
- Meeting of research participants’ group to clarify their understanding of their roles and practices as research participants in Participatory Action Research to develop teachers in classroom research.
- The researcher prepared a structured interview about the states, problems, needs and guidelines for teacher development in classroom research, presented to experts for examination and suggestions.
- The researcher collected data using an interview form.
- Meeting of research participants’ group, the researcher presents the results of the analysis of the states, problems, and needs for teacher development in classroom research to researcher group and the school committee to jointly find guidelines and action plans of the teacher development for the study and develop classroom research.
- Proceeding to contact trainers by sending a request for assistance as trainers to provide training and development of teachers in classroom research.

**Table 1 Action Plan for Teacher Development in Classroom Research**

<table>
<thead>
<tr>
<th>Activities</th>
<th>Time</th>
<th>Tools</th>
<th>Persons</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop &quot;Classroom Research&quot;</td>
<td>October 20-21, 2021</td>
<td>A test to measure knowledge of classroom research</td>
<td>Trainers, Researchers, Teachers</td>
<td>Wat Wang Yang school meeting room</td>
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<tr>
<td>Pre-Testing before training</td>
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<td>Lectures to educate and practice with exercises</td>
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<tr>
<td>Post-Testing after training</td>
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<tr>
<td>Conduct classroom research.</td>
<td>November 1, 2021-March 31, 2022</td>
<td>Classroom research interview form Supervision follow-up record</td>
<td>Teachers, Supervisors</td>
<td>Wat Wang Yang school meeting room</td>
</tr>
<tr>
<td>Practical research in the classroom according to actual conditions Writing a research report</td>
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<tr>
<td>Internal supervision Supervising and monitoring the research process in the classroom Supervision, follow up on research report writing</td>
<td>November 1, 2021-March 31, 2022</td>
<td>Supervision follow-up record</td>
<td>Teachers, Supervisors</td>
<td>Wat Wang Yang school meeting room</td>
</tr>
<tr>
<td>Research group meeting after the completion of PAOR anniversary development to summarize and reflect on the results.</td>
<td>April 5, 2022</td>
<td>Meeting notes</td>
<td>Teachers</td>
<td>Wat Wang Yang school meeting room</td>
</tr>
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</table>

Step 2: Act

The research group followed the action plan as follows:

- Carry out a workshop to develop teachers in conducting classroom research to train and develop teachers to gain knowledge, understanding and practice skills related to classroom research.
Step 3: Observe
The researcher and co-researchers jointly observed and monitored the implementation of teacher development in classroom research in order to obtain useful information for further reflection by collecting the following observational data:

- The workshop data was collected by using a knowledge and understanding test in classroom research and a structured interview. Overall, the workshop was conducted to develop teachers in classroom research.
- Collecting classroom research data, which is self-development data of research participants during classroom research, using the structured interview form, classroom research practice, and the classroom research evaluation form, and evaluation form the end of the classroom research, including a structured interview after the end of the classroom research.
- Collect internal supervision data by using supervision record forms to follow up and evaluate the results of the classroom research.

Step 4: Reflect
A meeting of research participants to jointly evaluate the performance and reflect after the implementation of teacher development in the classroom research is completed according to the PAOR loop by bringing data collected in the observation stage to analyze and translate, and reflect on results by jointly improving and correcting in case of defects and using the information obtained to adjust the plan and proceed according to the PAOR cycle until the problem is resolved or develops in the desired direction.

Results and Discussions
The results of this research can be used to discuss the results as follows:

- The results of the study of problems and needs for teacher development in conducting classroom research of Wat Wangyang School teachers under Nakhon Sawan Primary Educational Service Office Area 1, the research results were discussed as follows.

Classroom Research Condition of Wat Wang Yang School Teachers
Teachers at Wat Wangyang School had their opinions about the overall classroom research conditions at a low level and teachers had little research especially conducting formal classroom research in 5 chapters, which teachers were interested in. They will do classroom research but never received training and development before, causing a lack of confidence, teachers therefore prefer to do one-page research instead. This may be due to the fact that conducting 5 chapters of research is cumbersome and worrying that it cannot be done and does not have time to take on other tasks besides teaching work and there is no benefit in merit evaluation and academic used which corresponding with Thocharee (2010) who found that teachers at Ban Kham Lod
Phuen School under the jurisdiction of the Sakon Nakhon Educational Service Area Office 3 had a low level of classroom research. Phromwang (2011) has studied the development of research in the classroom of teachers. Nong PhaiPittayakom School Office of the KhonKaen Educational Service Area 5. The results showed that the classroom research of teachers was practiced but not an academic method, lacking documents, evidence, traces of systematic preparation because teachers did not have advanced knowledge and understanding. Teachers lacked knowledge on process or process of conducting classroom research in problem determination, systematic analysis, and could not define problem-solving methods and solutions. However, teachers can select problem areas and analyze content, but lack evidence on how to solve problems. Teachers also use trial and error method without tools and without knowledge of statistics and summarizing results and writing research reports. Teachers do not write according to the research writing component, and related to Khongsathit (2011) who has studied the method for developing classroom research. The results showed that, the state of planning is incomplete, unclear, less participation. The operational calendar is unclear. Teachers conduct little and discrete classroom research and do not dare to do and are afraid of doing incorrectly, therefore problems solving by giving tests or doing new exercises, thus causing students to not be developed as they should be and unable to solve problems directly to the point. The inconsistent supervision, inadequate learning resources/information resulted in classroom research being unsuccessful.

Classroom Research Problems

Teachers at Wat Wangyang School had opinions about the problem of conducting research in the classroom overall at a high level, and there were few teachers who had been developed or trained in conducting research in the classroom before. Teachers had little knowledge and understanding of classroom research, especially knowledge and understanding of formal research in 5 chapters and there was little supervision and follow-up of classroom research by teachers. This may be due to the group of teachers having the idea of doing research in the classroom that doing research is complicated and lack of knowledge and understanding of research in the classroom lack of textbooks about the research in the class. Motivation and enthusiasm for doing research in the classroom lacked a sample of research in the classroom, lacking continuous supervision, consistent with Thongrod (2005) research found that the problems in conducting classroom research on factors contributing to conducting research in classroom overall and each aspect were at a moderate level which corresponding with Thocharee (2010), research found that Ban Kham Lod Phuen School teachers under the Office of Sakon Nakhon Educational Service Area 3 had problems in conducting research in the classroom at a high level. Consistent with Nontakot (2007) has studied the guidelines for the development of classroom action research of teachers in a case study of Muang Loei School, Muang District, Loei Province, it was found that teachers still did not fully understand the form and process of conducting operational research in class. That’s right, teachers have too much workload, lack of resources for conducting classroom action research, and insufficient funding for classroom action research, teachers lack awareness and do not see the value of their work. classroom research

The Need for Classroom Research

Teachers at Wat Wangyang School had the opinions about the need for classroom research in overall at the highest level. Teachers wanted to organize a formal classroom research workshop in 5 Chapters. There are trainers who have knowledge and ability to do classroom research and want to be supervised, follow up, giving advice on classroom research. Teachers can request to be promoted to higher positions. They want their research results to be published to nearby schools. They want administrators to support classroom research funds, including teaching materials, documents about doing classroom research, high-speed internet in order to benefit the teacher’s classroom research and also be beneficial to teaching and learning activities which consistent with Thongrod (2005), the research results showed that the overall and individual research needs were at a high level which comparison of teachers’ classroom research
problems by educational level. The results of the analysis revealed that teachers at different grade levels had no different opinions about research needs with statistical significance at the .05 level, and consistent with Thocharee (2010) and Nontakot (2007) which teachers’ classroom action research is as follows: all teachers are needed to conduct classroom action research to make teaching and learning more effective, schools can apply teacher research data to solve problems in organizing, and teaching activities are corrected.

Guidelines for Teacher Development in Conducting Classroom Research

Wat Wangyang School has set guidelines for teacher development in conducting classroom research as follows: 1) organize formal classroom research workshops by trainers who are knowledgeable and capable in conducting classroom research, 2) teacher conducts classroom research practical in each step of the classroom research, 3) provides supervision by a group of supervisors, follow-up, guides, assists teachers in conducting classroom research continuously. This is in related to the process of Participatory Action Research in teacher development and inviting trainers with knowledge and expertise in classroom research to be lecturers so that teachers can fully gain knowledge and set up a supervision system, supervise and monitor classroom research as teachers conducted in action plans which are made and results periodically reviewed by experts in order to ensure that classroom research is complete and of quality. Which consistent with Nonthakot (2007), who found that the research team and school teachers jointly developed a teacher development plan in conducting classroom action research by organizing training seminars on conducting research at least twice per semester, organize a budget to support training, seminars on conducting classroom research, provide resources to search for information or research samples for teachers to learn about classroom research. The results of the research showed that teacher development guidelines include workshops, hands-on research in real conditions, and continuous supervision which related to Promwang (2011) who found that guidelines for conducting classroom research development of teachers. The teachers jointly developed classroom research by organizing workshops on the results of the implementation of the action plan for teachers to practice writing in depth in detail, researching in class, expressing opinions, sharing knowledge with each other, and everyone participated in determining the model for the development of teacher’s classroom research of Nong Phai Pittayakhom School, and in accordance with Kongsathit (2011), the research findings showed that the guidelines for the development of classroom research in every group participated in the planning and operation of raising teachers’ awareness, developing teachers to have knowledge and can do classroom research, support the necessary budget and media equipment, teachers conduct classroom research continuously, supervise, follow up regularly, publicize thoroughly, have an action calendar, and continue to lead by philosophers in the local area to assist in teaching and learning.

Monitoring and Evaluating the use of Teacher Development Guidelines in Classroom Research

When conducting the Participatory Action Research at the end of the cycle, it was found that 8 teachers who were co-researchers had knowledge, understanding and awareness of classroom research and were able to do formal classroom research very well which consistent with Buasathaporn (2007) was found that joint evaluation and results reporting consisted of 2 parts: discussion and exchange of opinions about classroom research development through a participatory process. The classroom research development by participatory action research was at a high level because the experimental group participated in all stages of the operation were able to develop their own research appropriately and conduct classroom research effectively and continuously. Thocharee (2010) claimed that before conducting teacher development in classroom research, teachers lacking knowledge and understanding could not solve students’ problems, however after conducting teacher development in classroom research by workshop training and supervision, teachers have more knowledge and understanding to bring the research process in the classroom to improve the quality of learners effectively from the analysis of the data which obtained from the interview questionnaire.
and the cognitive assessment of the co-researchers, it was found that the co-researchers were able to conduct classroom research continuously at all stages to solve the problem by followed up the supervision of expert, and related to Phomwang (2011) who found that the results of research development in the classroom made teachers knowledgeable in conducting classroom research and found that they could solve problems in the classroom both in terms of achievement and students’ behavior, parents were satisfied which included educational management activities of the school after the evaluation, teachers had a statistically significant increase in knowledge and understanding of the research process in the classroom and able to apply problems arising from teaching and learning activities to conduct classroom research accurately and with full academic.

Acknowledgement
This research was funded by a research grant from Research and Development Institute of Nakhon Sawan Rajabhat University, Thailand.

References


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