

THE ROLE OF ADMINISTRATORS IN PROMOTING RESEARCH IN THE CLASSROOM

Samran Thongpaeng¹, Kittiwinn Dhedchawanagon² and Suthep Dhamatrakool³

^{1,2,3}Instructor, Faculty of Education, PhetchabunRajabhat University, Thailand1-3

DOI: 10.46609/IJSSER.2024.v09i03.012 URL: <https://doi.org/10.46609/IJSSER.2024.v09i03.012>

Received: 2 March 2024 / Accepted: 23 March 2024 / Published: 30 March 2024

ABSTRACT

This academic essay aims to illustrate the role of school administrators in assisting teachers to undertake classroom research, as classroom research has a direct impact on students. Education must be organized with the student as the primary emphasis, allowing the learner to play a role and engage in as many teaching and learning activities as feasible. Classroom research is therefore very important, considering that classroom research must be done in conjunction with teaching and learning, as a problem-solving process, developing teaching and learning processes that actually occur in the classroom, in order to suit subject matter and student potential. As a result, school administrators are expected to promote and support research in the classroom by developing policies and action plans for classroom research, including assigning support funding and establishing a suitable environment for research. Organizing workshops, encouraging lecturers to share their knowledge, increasing morale, and dedicating time to engage as researchers in the classroom may all be deemed advantageous to the actual growth of teaching and learning. However, the author, as both a teacher and educational personnel, would like to explain the role of school administrators in supporting classroom research among teachers in order to use research results to enhance teaching and learning, which is an academic contribution to the community.

Keywords: Role of Administrators / Promotion of Research / Research in the Classroom

I. Introduction

In a situation where society is changing rapidly, the management of various organizations must keep up with the changes; otherwise they will be left behind and will suffer failure in their management, because an organization's success or failure is determined by the abilities of its executives. Every company, whether public or private, seeks skilled administrators to oversee education administration. Administrators are often seen as having a significant impact on the

success or failure of educational institutions. According to the National Education Act, the term “administrators” refers to professional personnel who are responsible for the management of each educational institution, both public and private, and can be considered the primary mechanism for truly driving educational management in accordance with the decentralization policy. It is what educational administrators and the general public demand of an educational institution administrator, which is to be a “professional educational institution administrator”. Thai education in the era of educational reform requires educational institution administrators to be “professional educational institution administrators” with knowledge and experience befitting a high profession, is a professional personnel responsible for the management of educational institutions in addition to managing teaching staff, professional administrators must be academic leaders and learning reform leaders. According to the National Education Act, it has the authority to coordinate the participation of teachers, parents, school committee members, communities, and other stakeholders in mobilizing skills and resources for efficient and effective administration. In addition, having a quality assurance framework in place to guarantee that education satisfies national educational standards would contribute to the growth of learners into full human beings in all aspects, allowing them to be a vital force in the nation's future development.(Regional Ministry of Education, 2017)

It is clear that in order to be a competent administrator in the future, many fresh and unique traits must be blended with no set features, and school administrators are no exception. To be recognized as a professional executive in the future, administrators must have a long-term vision, a strategic management perspective, the ability to analyze, evaluate, and make decisions, and be in charge of the educational institution's normal operations in all aspects. To be efficient, operations must be managed with a new vision, the concept of integrated management must be adjusted to focus on problem solving and development that is clearly integrated in both policy and practice, and proactive management behavior must be demonstrated. The emphasis on work or outcomes obtained in accordance with the aims and quality that have been established as the basic principles of the supervisory position (supervision) must be clear, high competence, both supervision and help, and support. The ideal candidate should be able to effectively organize and use the capacity of all individuals associated in educational institutions. They should also act as an initiate, directing the way of thinking and coordinating good ideas for optimal results. Capable of developing understanding with personnel and coordinating well with personnel in all departments, being adaptable in coordinating relationships with staff at all levels, and providing personnel with suitable chances to engage in operations in all sections. Ensure that staff performance is evaluated using honest, fair, and transparent techniques, and that all areas of operations are ready for inspection, in order to generate knowledge of the situation among all parties and outside circles. Operational policy and the growth of educational institution quality,

with a focus on quality management (quality management), which is management that tries to achieve academic excellence. (Thanongsak Khumkhainam, 2017)

II. Roles and duties of executives

The National Education Act of 1999 and its modifications (No.2) of 2002 describe educational institution administrators as professional professionals in charge of the administration of all public and private educational institutions.(Educational Research Division, 2012)As a result, educational institution administrators play a crucial role in managing efficiently and effectively in accordance with the established objectives. School administrators are responsible for school administration and must examine the substance, knowledge and competencies of educational institution administrators, according to the knowledge criteria of the Teachers Council Secretariat, which are as follows;

1. Principles and processes of educational administration

Knowledge

- 1)Principles and theories of management and educational administration
- 2)Modern education administration and management systems and processes
- 3)Creating a vision for educational administration and management
- 4)Laws related to education
- 5)Context and trends in education management

Capacity

- 1) Can contribute knowledge and comprehension of educational administration concepts and theories, as well as their application to educational administration.
- 2) Can analyze, synthesize, and generate knowledge in educational administration.
- 3) Can establish the educational vision and goals.
- 4) Can effectively construct administrative structures and define the missions of teachers and educational professionals.

2. Educational policy and planning

Knowledge

1) Economic, social, political, and technical underpinnings that influence education.

2) Planning systems and theories.

3) Analysis and formulation of educational policy.

4) Educational quality development planning.

5) Education policy development.

6) Educational policy evaluation.

Capacity

1) Able to assess data and develop educational policies.

2) Capable of developing policies, planning operations, and assessing the quality of educational services.

3) Capable of developing a strategy to improve educational quality with the goal of achieving good outcomes while also researching society and the environment.

4) Able to implement educational quality development plans.

5) Able to track, evaluate, and report operating results.

3. Academic administration

Knowledge

1) Learning management that is student-centered

2) Principles and formats for curriculum development

3) Local curriculum development

4) Principles and concepts related to supervision

5) Educational supervision strategy

6) Planning and evaluation of educational supervision

7) Educational research methods system

8) Principles and techniques of educational measurement and evaluation

9) Statistics and computers for research

Capacity

- 1) Able to manage learning.
- 2) Able to develop educational institution curricula.
- 3) Able to supervise learning management in educational institutions.
- 4) Can promote research to improve the quality of learning management.

4. Administrative, financial, supplies, and building management

Knowledge

- 1) Laws related to administrative work, finance, supplies, and buildings.
- 2) Organization of internal control systems.
- 3) Techniques for managing the environment within educational institutions.

Capacity

- 1) Capable of efficiently organizing documents.
- 2) Capable of managing the budget accurately and systematically.
- 3) Be able to successfully establish a management system and manage resources inside the educational institution.
- 4) Capable of creating a learning environment through physical design.

5. Personnel management

Knowledge

- 1) Principles of personnel management.

Capacity

- 1) Capable of attracting and hiring competent employees.
- 2) Capable of arranging individuals according to their roles.
- 3) Teachers and workers at educational institutions can be trained to fulfill their tasks effectively.
- 4) Can boost the morale of instructors and other people in educational institutions.
- 5) Capable of providing advice and resolving work-related issues for teachers and other educational workers.

6. Student affairs administration

Knowledge

- 1) Morals, ethics, values, and desired characteristics.
- 2) Student care and support system.

3) Organizing activities to promote and develop students.

Capacity

1) Able to manage student development activities.

2) Able to manage student management work.

3) Can promote the organization of special activities to develop students' potential in various fields.

4) Can promote discipline, morality, ethics and unity among the group.

7. Educational quality assurance

Knowledge

1) Principles and processes for educational quality assurance.

2) Components of educational quality assurance.

3) Educational standards.

4) Internal and external quality assurance.

5) The role of administrators in educational quality assurance.

Capacity

1) Capable of developing a plan to improve the quality of educational institutions.

2) Capable of assessing and monitoring the quality and educational standards of educational institutions.

3) Capable of preparing reports on the outcomes of educational institutions' self-evaluation to complement external evaluations.

8. Information technology management

Knowledge

1) Information technology for education.

2) Information technology for management.

3) Information technology for learning management.

Capacity

1) Capable of effectively using and managing information technology in school and the workplace.

2) Able to assess the use of information technology to improve management.

3) Can encourage and facilitate the use of information technology in education.

9. Public relations and community relations management

Knowledge

- 1) Principles of public relations.
- 2) Strategy for building relationships with the community.

Capacity

- 1) Capable of managing information for students, instructors, and other educational professionals.
- 2) Capable of communicating information, news, and activities from the educational institution to the community.
- 3) Can employ suitable public relations methods.
- 4) Can plan events to foster positive relationships with the community, with the purpose of assisting the community and providing opportunities for participation.
- 5) Capable of mobilizing resources and local knowledge to promote education.

10. Morals and ethics for educational institution administrators

Knowledge

- 1) Morals and ethics for executives.
- 2) Ethics of the profession of educational administrators.
- 3) Developing executive ethics to act within a moral framework.
- 4) Good governance.

Capacity

- 1) Be a moral, ethical leader who sets a good example.
- 2) Follow the ethical guidelines for educational institution administrators.
- 3) Encourage and develop coworkers to have suitable morals and ethics.

III. The role of administrators in promoting research in the classroom

Administrators have a vital role in encouraging and supporting teachers in schools so that they can undertake research successfully. (Natthaya Adisainikorn, 2008) The author recommends the responsibility of administrators in encouraging and supporting teachers' classroom research inside schools in five ways, as follows;

1. Promote the success of research in schools by stimulating and supporting teachers to conduct research in schools until the results are achieved according to the set objectives. Most administrators or related educational agencies are not interested in organizing the administrative process to facilitate research in schools that is consistent with the needs and interests of teachers doing research in schools, so that it is beneficial to teachers carry out research work in schools, including;

- 1.1 Develop explicit policies or procedures to promote research.

1.2 Meeting to discuss the policies aims, and duties of instructors who desire to do research to improve teaching and learning.

1.3 Support the allocation of budget for research.

1.4 Find various equipment or facilities to promote research.

1.5 Create an environment that encourages research, such as a room or section designated for studying and researching.

1.6 Provide guidance and support in locating papers, textbooks, and research that will be valuable to instructors conducting study.

1.7 Plan the gathering of research information on teaching and learning development for research purposes.

1.8 Monitor and monitor instructors' research to ensure that it meets the research action plan's aims.

1.9 Follow up to identify difficulties, deficiencies, strengths, and weaknesses in instructors until they reach the stage where they can conduct research.

2. Respecting teachers who conduct research in schools is a way to honor and praise teachers who have research abilities, which most administrators or related educational agencies value in order to encourage teachers to take pride in their own research results, including disseminating the research results to be widely known, including;

2.1 Recognize and reward instructors who do research during school and other meetings.

2.2 Give certificates or awards to teachers who do research.

2.3 Encourage teachers who do research as representatives to participate in research seminars to improve teaching and learning.

2.4 Allow instructors to exchange perspectives on knowledge and research experiences.

2.5 Allow professors to propose policies for research administration.

2.6 Organize and encourage teachers to be responsible for school research

initiatives.

2.7 Encourage instructors to use their research expertise and lecturing skills to communicate knowledge to students.

2.8 Encourage teachers with research knowledge and skills to serve as mentors for teacher research.

2.9 Encourage instructors in the same topic to communicate and exchange ideas regarding research with one another.

2.10 Encourage the distribution of research findings so that the general public may understand them.

3. Giving importance to research in schools that gives importance and sees the benefits of research that takes place in schools, as most administrators or related educational agencies are not interested in encouraging teachers to seek new knowledge to be used to improve teaching and learning, including;

3.1 Advising and motivating teachers to enhance the teaching and learning process using research as a foundation.

3.2 Encourage instructors to pursue research and discover new information, which will help them improve teaching and learning.

3.3 Provide instructors with opportunities to study and develop knowledge and experience in research to improve teaching and learning.

3.4 Allow instructors to conduct study and obtain information from numerous sources outside of the classroom during their leisure time.

3.5 Encourage instructors to expand their expertise by advising that they study books, textbooks, papers, and periodicals relevant to research.

3.6 Contact and collaborate to locate information sources or research consultants.

3.7 Plan training to increase knowledge, comprehension, and research techniques.

3.8 Organize research workshops to help instructors expand their knowledge,

talents, and experiences.

3.9 Arrange for lecturers to conduct lectures to improve research understanding.

3.10 Use research findings in the school to develop school policies.

4. Having responsibility for teachers who conduct research in schools, which is a duty to treat teachers who conduct research in schools, which most administrators or connected educational agencies are not interested in or care about, so that teachers conduct research in schools can get assistance, both in terms of knowledge and understanding about research until it achieves the stated objectives, including;

4.1 Establish a framework to support instructors in conducting research that is compatible with their obligations.

4.2 Try to give instructors with research knowledge and guidance to help them enhance their teaching and learning skills.

4.3 Assist professors in resolving issues that impact research activities.

4.4 Help provide research supervision to instructors.

4.5 Take part in the hunt for new choices and solve difficulties that lead to classroom research.

4.6 Encourage instructors to become research leaders in order to urge them to do research.

4.7 Develop work processes at the school to help instructors execute their tasks, such as being autonomous, daring to think, study, and experiment with new ideas.

4.8 Help recommend and consider research subjects to improve teaching and learning.

4.9 Contribute to the analysis of issue situations in order to develop guidance for future study.

4.10 Contribute to the development of creative teaching and learning alternatives, as well as improvements to research such as media or teaching equipment.

5. Promotion in terms of career development for teachers who do research in schools as a reward for their obligations, or the use of promotions to higher positions based on teachers' tasks as a result of teachers conducting research in the classroom. Most administrators or connected educational agencies do not prioritize personnel management in schools, utilizing teachers' research findings as one criterion, to examine merit, or to promote instructors to higher positions, notably;

5.1 Encourage and motivate teachers to consider ways to improve teaching and learning through the research process, which will help to enhance the teaching profession.

5.2 The development of research in schools is considered part of the merit-based evaluation.

5.3 Consider awarding recognition to instructors who do research and apply the findings to enhance their teaching.

5.4 Allow instructors to get teacher research findings, which may be utilized to seek for promotion to a higher position.

5.5 Provide chances for instructors who have conducted research to further their careers.

5.6 Encourage teachers to do research and have opportunities to progress in their careers.

5.7 Assign obligations to instructors who have research projects, making them responsible for work that needs more knowledge and talents.

5.8 Encourage instructors with research experience to be appointed as academic leaders.

5.9 Encourage instructors with research results to exploit their findings in order to further their careers.

Therefore, the author finds that in the concept of the role of administrators in promoting research in the classroom mentioned above, it can be concluded that the role of administrators in promoting research in the classroom is a method of providing assistance, or supporting research-related activities to enhance students, instructors, and the teaching and learning process in schools, such as support for successful classroom research.

IV. Importance and necessity of classroom research

Section 30 of the National Education Act B.E. 2542, as amended (No.2) B.E. 2002, states that educational institutions must develop effective teaching and learning processes, including promoting teachers' ability to conduct research to develop learning that is appropriate for students at each level of education. It is clear that research is one method for improving the quality of education. Because research is a scientific process that uses reason to study and research to answer questions, solve problems, or develop things in a systematic manner, advanced professional circles or organizations use it to develop professional advancement or their own organization.(BanjongChaisiwan, 2015)

The importance and necessity of conducting research in the classroom is to assist teachers in leading a systematic life, seeing a picture of their work along the way, and making quality decisions because they will be able to see a wide range of options, deepen, and then decide to choose that path rationally and creatively. Teacher researchers will have more opportunity to reflect on the reasons for their work, and teachers will be able to determine whether or not the teaching and learning activities they adopted were beneficial, and why. Furthermore, instructors who use the research process to create their teaching methods will be able to effectively regulate, guide, and develop their own performance. Because work and the outcomes of work have purpose and worth for instructors in growing their pupils, which will provide knowledge of their work and enjoyment in teaching correctly, this will bring about excellent results in the education world and the teaching profession in at least three ways, namely;

1. Students will benefit from higher-quality, more efficient learning.
2. Education disciplines will incorporate a wealth of information and/or advances in teaching and learning.
3. Teacher's way of life or will the work culture of teachers develop into a more “professional teachers”, this is because teacher-researchers will have the qualities of being knowledge seekers or learners (learner) of the science of teaching continuously and lively. Finally, he will be a person with a comprehensive and deep grasp of the science and art of teaching, as well as a teacher with good teaching practices who can educate students to advance in a variety of topics and circumstances. Also known as a knowing teacher or master teacher, the presence of more such instructors and researchers would aid in the growth of a creative and stable teaching profession.

Since a result, the author believes that classroom research is critical for students, instructors, schools, and the education community, since it helps learners reach their full potential. There is a

balance of information, concepts, talents, good acts, and social responsibility that meets the requirements of the National Education Act B.E. 1999 and its revisions (No.2) B.E. 2002. Teachers develop and increase their knowledge, work systematically, can use research to solve problems or develop teaching and learning in their classrooms, schools can formulate plans or policies regarding the development of curriculum and teaching appropriately, supported by research. From the above, it creates the development of the teaching profession to have standards and shows the progress of the teaching profession.

V. Classroom research process

The author summarizes the classroom research process in 5 steps as follows;

1. When studying difficulties for research or preparing teaching and learning activities in the classroom, instructors are inevitably confronted with the dilemma of pupils whose conduct contradicts the teacher's aspirations, often known as the problem of expectations against reality. This is an issue that must be solved by research, thus the instructor must do three things in this step: examine the problem and its causes, describe the problem for research, and choose a topic to investigate.
2. Prepare to fix the problem once instructors have researched the problem, the next stage is to prepare a solution. Teachers will do four actions in this step: examine issue causes, identify solutions to address student difficulties, design new media and evaluations to solve student problems individually, in groups, or as a class, and select the time period for research.
3. When solving problems in this step, teachers must consider three activities: solving problems within a specific time frame, solving problems in accordance with teaching activities in class learning, and collecting data on student performance from experiments using newly developed innovations.
4. Summary of problem solving results in this step; teachers have 4 activities to perform as follows; 1) analyzing student learning results, 2) discussing results, 3) summarizing knowledge to solve problems, and 4) writing a research report. However, while writing a research report, it can be as simple as noting the research topic, techniques for solving the problem, and the outcomes of the answer, or it can be as long as five chapters. These include the introduction, related documents and research, research methods, research results, research summary, discussion of results, and recommendations.
5. Distribution of research findings in the classroom the distribution of research results in the classroom, which is the final phase in the classroom research process cycle, is a key step in encouraging and supporting teachers to recognize the value and importance of doing research in

the classroom. Therefore, after summarizing the data and drafting the research report, instructors should communicate the research results to colleague teachers or interested individuals to study further utilizing the following four methods;

5.1 Present research findings in class to the subject meeting so that fellow teachers can see examples of high-quality classroom research and understand the importance of conducting research in the classroom as a guideline for fellow teachers in the same category to study and develop their own classroom teaching, using the research process as a method for developing quality learners.

5.2 Present research findings in class to educational institution administrators in order to make administrators aware of teachers' teaching practices, using the research process to develop learning, which may result in administrators realizing the importance of research in the classroom and being able to provide additional encouragement and support to teachers in school.

5.3 Create a brochure to send to teacher friends in and out of school, as well as individuals who are interested in learning more about studying and producing research in the classroom.

5.4 Teachers promote classroom research findings to academic conferences, fairs, and research market activities.

5.5 Submit research findings for instructors' classroom research and publish them in academic publications or on other agency websites.

As a result, classroom research does not have a mandated structure that demands creating a research outline; nonetheless, if the researcher want to prepare properly, producing a research outline will demonstrate that the study is clear and methodical, as well as having a greater chance of success. After finding the problem that will be used for research, the researcher tries to write a research outline which includes the following topics; 1) title 2) background and importance of the problem 3) research questions 4) research objectives 5) benefits received 6) variables obtained 7) research methods 8) sample group 9) tools used 10) data collection and 11) data analysis.

For producing a research report, this may be accomplished by increasing the contents of the study design and going into depth about the research methodology to demonstrate how the researcher completed each stage. The next step after the analysis is to report the results of the data analysis in various presentations, tables, or charts. The appendix is the final and most crucial section, which contains proof, traces of operations, and reflections from many stakeholders.

VI. Promoting research in the classroom

Promoting and supporting research by teachers, from researchers, academics, and educators, including teachers, at the secondary and tertiary levels, at the central and regional levels, who come together to plan the direction of development, ensures that the quality of educational research is consistent with current and future local conditions.(Natthaya Adisainikorn, 2008)It arranges practical meetings about educational research directly. Educational Research Division In 2020, the Department of Academic Affairs can describe the following major problems regarding recommendations for producing and supporting research in the classroom to improve teacher teaching and learning;

1. A provincial research advisory group should be formed to provide guidance on teacher research. Each province has a central agency that conducts defined coordination roles in terms of both duties and responsibilities in order to improve the quality of education in each community.
2. Information centers must be developed at the provincial level, as well as school groups, to give information and enable usage as an essential source of information for research that is actually useful to the growth of educational quality in each community.
3. The focus should be on making every educational agency, from the executive level to the operator level, aware of the relevance of research, teaching, and learning growth, particularly at the educational institution level, where instructors and research leaders are required.
4. The state should prioritize budget allocation for national educational research and allow the private sector to participate in funding educational research in order to continuously develop the quality of education together, with close monitoring, supervision, and evaluation.
5. There should be continuous training, meetings, seminars, providing knowledge, understanding, and research practices to teachers, including guiding the development of teaching and learning with the process of research giving the correct direction, and in line with the needs of each locality, cooperation must be created between agencies in both the central and regional regions, in exchanging news or research information with those who use research results con
6. Help create morale among local researchers so that they are fully devoted to development research, particularly teaching and learning in accordance with their school obligations.
7. Emphasis should be placed on teachers who conduct research in educational institutions and produce research results for the development of teaching and learning in accordance with their responsibilities, such as disseminating researcher honors and selecting outstanding research works at the provincial, district, and national levels.

8. The ethics of local researchers should be nurtured in order to foster love and faith in research progress.
9. Each province should form a research club to review research efforts and offer local teaching and learning opportunities.
10. Clearly describe the research network's tasks and responsibilities, taking into consideration challenges and demands at both the practitioner and executive levels in each agency, both centrally and regionally.
11. Research coordination organizations and personnel must be established at the education district and provincial levels, and they must be independent research agencies that include not only the Ministry of Education but also other educational agencies such as universities, private educational institutions, and so on, to participate in research as well as promoting persons participating in national education development to raise awareness of the relevance of educational development via the application of research methodologies and procedures.

In the notion of promoting research in the classroom discussed above, the author concludes that promoting research in the classroom is a methodology and approach for offering aid or supporting the organizing of research-related activities to improve students and instructors. Develop the teaching and learning process in schools by collaborating with school and non-school staff, numerous associated agencies, and supporting variables that allow successful classroom research.(Kittiwin Dhedchawanagon, 2023)

VII. Conclusion

Academic administration is regarded as the most important, particularly the promotion of classroom research. As such, educational institution administrators are responsible for making decisions about school operations that are efficient, effective, and achieve results in accordance with school management goals. Administrators of educational institutions are regarded educational professionals as well as controlled professionals, thus they must receive an administrator professional license in accordance with Teachers Council criteria.(Office of the National Education Commission, 2013)However, executives must have 3 skills that enable management to achieve its goals: (1) technical skills, (2) human skills, and (3) conceptual skills. Furthermore, executives must demonstrate transformational leadership since there are technical improvements, new ideas, and research developments in all fields of science and social science. Administrators must employ methods to influence and lead others in changing the school's organization or people, including students, teachers, school board members, and all others engaged. Administrators and teachers at educational institutions, in particular, have a critical responsibility to develop individuals with quality, knowledge, and moral character. There is

preparation to accommodate change because people are naturally afraid of change, concerned that it will cause difficulties and an increase in workload. Executives must be cautious and flexible, and one of the most important decisions for executives is the selection of appropriate strategies and tactics for managing organizational changes.

Reference

Adisainikorn, N. (2008). The role of administrators in promoting research in the classroom of basic educational institutions Under the Narathiwat Educational Service Area Office, Area 2. Master of Education Thesis, Major: Educational Administration, Faculty of Education, SukhothaiThammathirat Open University.

Chaisiwan, B. (2015). The role of school administrators in promoting classroom research among teachers Under the Kalasin Educational Service Area Office, Area 2. Master of Education Thesis, Major: Educational Administration, Graduate School, Maha SarakhamRajabhat University.

Dhedchawanagon, K. (2023). Development of Bilingual Teaching Models According to Multicultural Education Approaches Using English and Ethnicity Language. *Rajabhat Chiang Mai Research Journal*, 24(2), p. 32-55.

Educational Research Division (2012). *Research for learning development (Research for learning development)*. Bangkok: Teachers Council.

Khumkhainam, T. (2017). *Educational administration techniques*. Chaiyaphum : ChaiyaphumRajabhat University Graduate Institute.

Office of the National Education Commission.(2013). *Classroom research of teachers in the school reform project. Learning to develop student quality: Selected examples of experiences*. Bangkok: Phrik Wan Graphic.

Regional Ministry of Education.(2017). *Research to develop learning according to the basic education curriculum*. Bangkok: Ministry of Education.