

## Synthesis of research report of personnel: Case study on Faculty of Education, Mahasarakham University

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### ABSTRACT

The purpose of this research was to synthesize research report of personnel in the Faculty of Education, Mahasarakham University. There were 81 research reports funded by Faculty of Education, Mahasarakham University between the academic years of 2012-2019 were employed. The research revealed that most of research concerning teacher development amounting to 69 researches, followed by research report of the support staff amounting to 12 researches. Most of research reports were basic research, applied research, and collaborative teaching research amounting to 55 researches, followed by production research and development of personnel that emphasized on the concept of learning based on the actual situation amounting to 11 researches. The greatest number of research was produced and published in 2018, 23 researches, and in 2019, 13 researches. They were publishing in Thai journals, total of 75 research. The utilization of research to apply for policy benefits, 75 research and for public in four research. Research methodology employed 50 operational researches, 29 quasi-experimental researches, 33 researches to studies, 25 comparative researches and 16 researches to find correlation.

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### 1. INTRODUCTION

Faculty of Education is one of the oldest faculties in Mahasarakham University. It was established for the purpose of producing quality graduates, who love teaching, with wisdom, morality, bring knowledge to work units and people in local communities and emphasizes research for the development of education. One of its mission is creating research and innovation of education to high quality standards. Faculty of Education, Mahasarakham University aim to produce and develop a research of teachers and support staff for new knowledge, innovation and technology, and then applying the results to develop personnel performance, learning process for producing quality graduates and professional education to meet the needs of various aspects of society and for guiding to good practice is appropriate for society. The faculty has the research development strategy: build research networks with both domestic and international educational institutions, publish papers among national and international and is recognized nationally and internationally. Providing funding sources, facilities, database network, research team to encourage and help teachers and support staff to produce quality research, as well as organizing activities to honor researchers whose work has had recognized research [1], [2].

Research is more important for professional development in education, educational quality assurance and producing quality teachers and educators. At present, the Faculty of Education, Mahasarakham University has a policy to encourage teachers and support staff to produce quality research that can be used for developing teaching and learning, courses in institute, as well as the national education, to develop research efficient, to promote disseminating research results and new knowledge to educational organizations [3]–[5]. Therefore, the implementation of policies improving the quality of the faculty to achieve the goal of education, the Research Department of the Faculty formulated a research fund support plan for teachers and support staff for fiscal year 2005 to promoting the work of teachers and support staffs to consistent with the Education Development Strategy, that aim to improve the quality of education, promote learning of learners and supporting the academic production for academic positions of teachers and support staffs.

Research synthesis is the process of combining the results of multiple primary research studies aimed at testing the same conceptual hypothesis. It may be applied to either quantitative or qualitative research. Its general goals are to make the findings from multiple different studies more generalizable and applicable. The research synthesis has an important preliminary agreement that the research that is synthesized each subject provides the findings of each aspect of the phenomenon that the researcher wants to study and when the research results are synthesized together, the results of the synthesis are obtained more breadth and depth than would be obtained from individual research studies [6]–[8]. The aim of the research synthesis is to obtain a clear, conclusive statement of the findings of the scattered research to be clearer and more consistent [9], [10]. Research synthesis is the process of acquiring knowledge or answering research questions with scientific method [11]. Collecting research on the problem and analyzing by using statistical methods or qualitative data analysis methods and summarizing the information systematically in order to get answers according to the desired research problems. The research synthesis is a study of the research carefully and then conclusions from each research topic are categorized, compare the similarities and differences of the research studies to a conclusion [12]. Therefore, may be concluded as research synthesis is a fact-finding study to answer a specific problem from several volumes of research and bring to analysis systematically and present to gain new knowledge [13]–[15].

A research of personnel in Faculty of Education, Mahasarakham University is lack of collecting and synthesizing research to create new knowledge, cause those studies is incomplete, cannot use to improve the quality of academic work. Therefore, the researcher is interested in synthesize research of teacher and support staff in the Faculty in order to promote more efficient development and as information for further educational development. The objectives of synthesize research report of personnel in Faculty of Education, Mahasarakham University between the academic year of 2012-2019 with the following specific purposes were: i) To study substantives of research such as research title, research objective, research problem of teachers and support staff, Variables studied in the research and the benefits and ii) To study methodological of research such as research pattern, research tool and target population.

## 2. RESEARCH METHOD

The research target population were 81 theses of teachers and support staff of research funded by Faculty of Education Mahasarakham University between the academic years of 2012-2019. The study duration conducted between December 2019 and September 2020. The process of creating and developing tools are:

- a. Study the concepts, theories, documents and related research which can be scope and aims of research in education.
- b. Apply the concepts obtained from the study to developing the tools to be consistent with the use of data collection in research synthesis: i) Define the variables associated with it clearly; ii) The researchers have determined this quality assessment form as being directly. It was the 5 levels of rating scale which provides for the lowest score is 1 and the maximum score of 5; iii) Research feature record form, correlation research feature record form, an experimental research feature record form, comparative research feature record form and research results was created, which of all were as a fill-in answers and choose answers; and iv) Bring the tool which is created to the research team to test the validity and to modify the tools to make it suitable for scope of content.
- c. After improving in accordance with 2.4 then presenting the tools to the experts to verify the validity and to modify the tools to make it suitable for scope of content.
- d. Bring the tools that is improved to use in data recording of 5 research to check the consistency of researcher's data recording as well as the integrity of data recording.
- e. Repeating in item 4 to find the consistency in researcher's data recording, 14 days from the first recording. The results were recorded both times, it can be considered that the researcher is consistent in data recording.

- f. Verify the reliability of the tools by using the Inter Rater Reliability method. The researcher and the research team recorded data on five research. The results were used to find the consistency of the assessment.

The data were analyzed by using descriptive statistic and content analysis are used to data reporting.

### 3. RESULTS AND DISCUSSION

The result of the synthesize 81 research report of teachers and support staff of Faculty of Education, Mahasarakham University that has produced and published research between 2012-2019. Research of personnel in the Faculty of Education, Mahasarakham University has a clearly title and research objectives which consistent with research methodology that can be obtained information that can answer research questions and objectives. The research direction is diverse by producing research according to interest expertise and the workload of each person. The faculty has supported the productivity of research personnel in all aspects to produce new knowledge by a diverse range of practitioners, academic researchers, and teachers, that there are no restrictions on funding research grants, as presented in Table 1.

Table 1. Summarize of research reports

| Type of research                           | Amount | Percentage |
|--|--------|------------|
| Basic research                             | 47     | 58.20      |
| Applied research                           | 26     | 32.11      |
| Experimental development research          | 3      | 3.70       |
| Academic research to community service     | 2      | 2.46       |
| Teaching and learning development research | 1      | 1.23       |
| Others                                     | 2      | 2.46       |

Between in the year 2012-2019 was produced and published as total 81 researches. Most of synthesis research report of personnel were research of the teachers amounting to 69 researches (85.19%), followed by research report of the support staff amounting to 12 research (14.81%). The mostly research were basic research report, 47 titles (58.20%), applied research as 26 titles (32.11%), experimental development research, three titles (3.70%), teaching and learning development research, one title (1.23%), academic research to community service, two titles (2.46%) and others, two titles (2.46%). Collaborative teaching research amounting to 55 research (67.90%), followed by production research and development of personnel that emphasized on the concept of learning based on the actual situation amounting to 11 research (11.58%). The result of research production in teaching and learning were classified as cooperative learning, 55 titles (67.90%), 11 learning concepts (13.58%), five computer lessons (6.17%), respectively, while other researches were 10 titles (12.35%).

The research direction is diverse by producing research according to interest expertise and the workload of each person. The finding of a research synthesis of personnel in Faculty of Education, Mahasarakham University, from 2012-2019 of 81 titles should be utilized to defines the research direction [16], [17]. It has not been researched for the benefit of improving and developing the organization to be effective and should seek funding from external agencies more such as the institute for the Promotion of Teaching Science and Technology [18], [19].

Most of the tools used are questionnaires, assessments, and quizzes form. There are different methods of data collection including interviews, observation, focus group discussions and using content analysis and thematic analysis for data synthesis. A systematic review of the relevant literature was used. There are combination of both quantitative and qualitative data collection. Qualitative data were used for content analysis and quantitative explanation of research results and explain the results of the research to be more complete. Instrument quality is inspected and tested meticulously for measure validity value, discrimination power value, difficulty value, and confidence value. Table 2 reveals the research of the Faculty of Education, Mahasarakham University takes about 1-2 years to produce.

Table 2. Summarize of research methods and objectives

| Research summarize   |                                  | Amount | Percentage |
|----------------------|----------------------------------|--------|------------|
| Research methodology | Practical (qualitative) research | 50     | 61.73      |
|                      | Experimental research            | 29     | 35.80      |
|                      | Survey research and others       | 2      | 2.47       |
| Research objectives  | To study                         | 33     | 40.74      |
|                      | To compare                       | 25     | 30.86      |
|                      | To find relationship             | 16     | 19.75      |
|                      | To develop                       | 6      | 7.42       |
|                      | To synthesize                    | 1      | 1.23       |

Research method were 50 practical (qualitative) research (61.73%), 29 experimental research (35.80%), and two survey research and others (2.47%). Research objectives were aimed to study, 33 titles (40.74%), to compare, 25 titles (30.86%), to find relationships, 16 titles (19.75%), to develop, six titles (7.42%) and to synthesize, one title (1.23%). Most of the data is collected and write a research report in the same year. As for the dissemination of research results was presented in journals both in the faculty, different institutions, foreign journals, academic forum, and Publishing in various journals in the next year. The statistics used in the data analysis consisted of percentage, mean, standard deviation, the variance, Pearson correlation, Descriptive statistics, before-after comparative analysis and between groups, including analyzing the relationship of variables and analyze variables and factors affecting variables on purpose.

Findings should promote the research synthesis with meta-analysis and content-analysis at least one title per year that can be used to develop administration group, student development group, curriculum and instruction group, information technology group and the guidance group [20], [21]. The information can make guideline to providing a direction of research trends or seek the appropriate way to help staff in research promotion [22], [23]. It is not new to routine to research, but the disruption makes research in different way, and easy to understand in research method. The promotion in research conduction should be continued and sustained in the way of academic staffs and researchers are actively specialized. Coaching and mentoring are required for strengthening and collaborating research in education as it the goals of sustainable development in field of education [24]–[27].

#### 4. CONCLUSION

Research of personnel in the Faculty of Education, Mahasarakham University has a clearly title and research objectives which consistent with research methodology that can be obtained information that can answer research questions and objectives. The most of research concerning teacher development amounting to 69 research, followed by research report of the support staff amounting to 12 research. Most of research reports were basic research, applied research, and collaborative teaching research amounting to 55 research, followed by production research and development of personnel that emphasized on the concept of learning based on the actual situation amounting to 11 research. The greatest number of research was produced and published in 2018, 23 research, and in 2019, 13 research. They were publishing in Thai journals, total of 75 research. The utilization of research to apply for policy benefits, 75 research and for public in four research. Research methodology employed 50 operational research, 29 quasi-experimental research, 33 research to study, 25 comparative research and 16 research to find correlation. The next promotion of research funding by organization should promote critical research and impacted research to international publication.

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