

The Best Practices in Research Management of Office of the Basic Education Commission

แนวปฏิบัติที่ดีในการบริหารงานวิจัยของสำนักงานคณะกรรมการการศึกษาขั้นพื้นฐาน

Wipaporn Nitiprechanon *

Abstract

The purposes of this research were to determine 1) the research management factors at the Office of the Basic Education Commission (OBEC) 2) the best practices in research management at OBEC.

The research procedures consisted of 3 steps : 1. study factors in research management at OBEC from documentation concepts of the theories, research reports and papers from various related sectors both of local and abroad. The statistic used to analyze the data in this step was content analysis, interviewed 6 specialists from national research management sectors 2. analyze factors used in research management, here of which, quantitative research was employed by collecting data from 145 samples Exploratory Factor Analysis (EFA) and Path Analysis in order to summarize factors in research management totally with 435 respondents 3. study the best practices in research management at the OBEC, here of which, Focus Group discussion was used.

The findings were as follows :

1. There were 48 factors for research management, which categorized into 4 components ; 1) resources management 2) Main Idea and clear objectives and research procedures 3) research communication by technology 4) participation from all sectors. The correlation of four factors has statistically significant at 0.1 levels and direct affect to 6 factors of the best practices.

2. The aspects of the best practices in research management for OBEC were :1) research management strategies 2) policies, objectives, tactics and research manner 3) research management framework 4) develop new researchers 5) research Information technology System 6) to value added and develop beneficial research

* Bureau of Education Innovation, Office of the Basic Education Commission Ministry of Education, Thailand Wipada_noncha@yahoo.com Dissertation Advisors : Asst. Prof. Prasert intarak, Ed.D. Assoc. Prof. Sirichai Chinatangkul, ph.D.

Introduction

This paper addressed the key components of research management that can formulate the best practices in the Office of the Basic Education Commission. The researcher investigated the techniques together with the enactment process that helped promote the goal achievement in the organization. That is to say, the best practices of research management were apparently consolidate the qualified research, the increasing number of skillful and expertise researchers, among teachers and educators who can gain more sponsorship in research conducting, conduct those along with their teaching and learning process, and carry their research results to be published which affect in the elevating of education quality development.

It is stated that research plays a vital role in that of being a tool for knowledge searching that helps develop the country. It was empirical that the use of education research results cannot effectively reveal the findings of research questions in Thailand. (Wattana Arthit-thieng. 2008). It was also found that the research in any organizations were conducted and distributed as individuals. The research results seemed to be more unique and specific in single area of study than, these of interdisciplinary one. As the networking among researchers are not linked, the implications of research findings seem irrelevant to the needs in the policy driven in the elevating of education quality.

However there are not only powerless researches conducted among organizations under the supervision of Office of the Basic Education Commission, but also they are conducted as individuals, and lack tacit knowledge, along with the discontinuing and the synthesis of the whole which lead to the unclear goals and destination. Some parts of the researches on education are abstract and cannot be taken into the implications because the researchers have different purposes. As a result, the research findings are varied, complicated, and have no impacts for the development of education. The problems found when conducting the research are those of the ambiguity in the goals setting, policies and the research frameworks that lead to the elevating of education quality for Thailand. It is also found that the lack of the knowledge management on how to put research findings for the implication, and the out of date research findings cannot be taken into account for the future change on education and cannot be enacted for the decision making.

Research Questions

The research questions investigated and clarified are as follows :

1. What are the main factors of research management of Office of the Basic Education Commission?
2. What are the aspects of Best Practices in research management and how they play their roles?

Research purposes:

The purposes of the study were to determine:

1. the research management factors at the Office of the Basic Education Commission (OBEC)
2. the aspects of the best practices in research management at Office of the Basic Education Commission.

Research hypotheses

There are two hypotheses for the investigation of this study namely:

1. The factors in research management at the Office of the Basic Education Commission are classified as multi-factors.
2. The aspects of the Best Practices in research management at the Office of the Basic Education Commission are multi-factors relation.

Research Framework

This study was developed under the concept synthesized from 6 research organizations both Thailand and various aboard resource. The investigation was taken through the development of research management among 226 organizations and departments under the supervisions of Office of the Basic Education Commission, literatures and research reviews.

The data were collected from the 435 specialists and the participatory action research was also included as shown on the figure below.

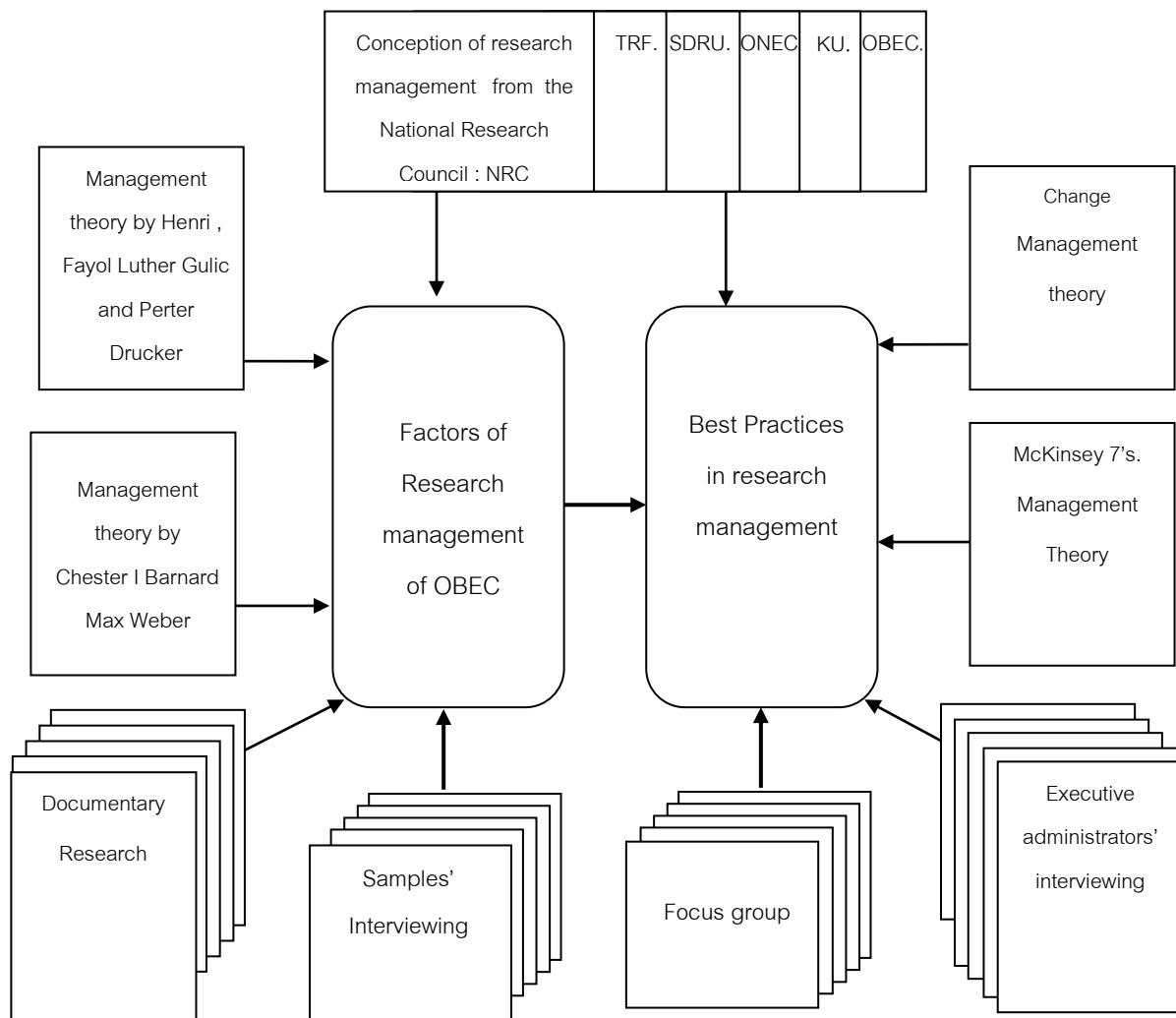


Figure 1 : Research Framework “The Best Practices in Research Management of Office of the Basic Education Commission”

The study was developed under the conception shown below:

1. **Henri Fayol's Formal Organization Theory** focuses the individual performance and how to do the jobs effectively. The line of command is hierarchical from the top ranking to the bottom one. There is also the unique of command, the span of control. It is recommended that the ratio of commanders towards the one under his/her supervision in command and span for the effectiveness is 1: 6.

Fayol's general principles in dividing for the line of commanding was that of decreasing levels of commanding according to the responsibilities between the commander and staff.

2. **Luther Gulick** suggested the 7 management principles in the administration with “POSDCoRB”. There are P-Planning, O-organizing, S-Staffing, D-Directing, Co-Coordinating R-Reporting, and B-Budgeting

3. **Peter Drucker's** prioritized " learning among workers " and how to do gain benefits for organizations. He also stated the roles of effective administrators in that 1) the administration can leads and able to build a motivation and inspired. 2) good leaders should possess analytical thinking in decision making and capable to provide the right jobs to the right person. 3) Contribute to the organization, be skillful in time management, recognize the strengths and gain benefits from team working, as well as being Good Communicators

4. **Chester I Barnard** give priority to individuals and cooperate with the organization goals. The needs of individuals must be in balanced. The administrators should take the essence into account in terms of collaboration among organization.

5. **Max Weber** stated the Bureaucracy Organization theory in that the principles of public administration are authorized by laws and regulations. There are also stated about the regulation on responsibilities and expertise in a particular way, without personal benefits, but a stable career. There are both advantages and disadvantages in this bureaucracy management theory. The benefits for the publics, the commanding, and fair promotions are examples of mainly advantages. The disadvantages are those of delayed and complicated lines of commanding that based on laws and regulations which cause the sluggish practices or “Red tape”.

6. **Change management** is a structured approach to shifting/transitioning individuals, teams, and organizations from a current state to a desired future state. It is an organizational process aimed at empowering employees to accept and embrace changes in their current business environment. Kurt Lewin proposed a three stage theory of change commonly referred to as **Unfreeze, Change, Freeze**

Stage 1: Unfreezing

The Unfreezing stage is one of the more important stages to understand the change today. This stage is about getting ready to change. It involves getting to a point of understanding that change is necessary, and getting ready to move away from our current comfort zone. This first stage is about preparing one selves, or others, before the change. Unfreezing and getting motivated for the change is all about weighing up the

'pro's' and 'con's' and deciding if the 'pro's' outnumber the 'con's' before taking any action.

Stage 2: Change - or Transition

Kurt Lewin was aware that change is not an event, but rather a process or a transition. Transition is the reaction to a change. This second stage occurs as one make the changes that are needed. People are 'unfrozen' and moving towards a new way of being. Support is important and can be in the form of training, coaching, and expecting mistakes as part of the process. Using role models and allowing people to develop their own solutions also help to make the changes.

Stage 3: Freezing (or Refreezing)

Kurt Lewin refers to this stage as freezing although a lot of people refer to it as 'refreezing'. As the name suggests this stage is about establishing stability once the changes have been made. The changes are accepted and become the new norm. People form new relationships and become comfortable with their routines. (http://www.change-management-coach.com/kurt_lewin.html)

7. **The McKinsey 7'S Framework** is a management model developed by well-known business consultants Robert H. Waterman, Jr. and Tom Peters in the 1980s. It is a framework for analyzing organizations and their effectiveness. It looks at the seven key elements that make the organizations successful, or not: strategy; structure; systems; style; skills; staff; and shared values. The model of McKinsey 7's is based on the theory that, for an organization to perform well, these seven elements need to be aligned and mutually reinforcing. So, the model can be used to help identify what needs to be realigned to improve performance, or to maintain alignment and performance during other types of change. Whatever the type of change – restructuring, new processes, organizational merger, new systems, change of leadership, and so on – the model can be used to understand how the organizational elements are interrelated, and so ensure that the wider impact of changes made in one area is taken into consideration.

(http://www.valuebasedmanagement.net/methods_7S.html

<http://www.davechaffey.com/E-business/Ch10-Change/mckinsey-7s-strategy-model/>; http://www.1000ventures.com/business_guide/mgmt_inex_7s.html; http://en.wikipedia.org/wiki/McKinsey_7S_Framework)

Research Method

This research was carried out in the context of Office of the Basic Education Commission, Ministry of Education, Thailand.

The research was carried out under the context of Office of the Basic Education Commission through the procedures which consisted of three stages namely:

Stage1: the study of main factors in research management at the Office of the Basic Education Commission through two methods namely: Documentary research and key informant's interviewing, here of which the content analysis was used to analyze the data.

Stage 2: the analysis of main factors affecting the research management at Office of the Basic Education Commission through Exploratory Factor Analysis (EFA) and Path Analysis (PA)

Stage 3: the developing of best practices in research management at Office of the Basic Education Commission through the Focus Group Discussion

The research procedure is shown in the figure below:

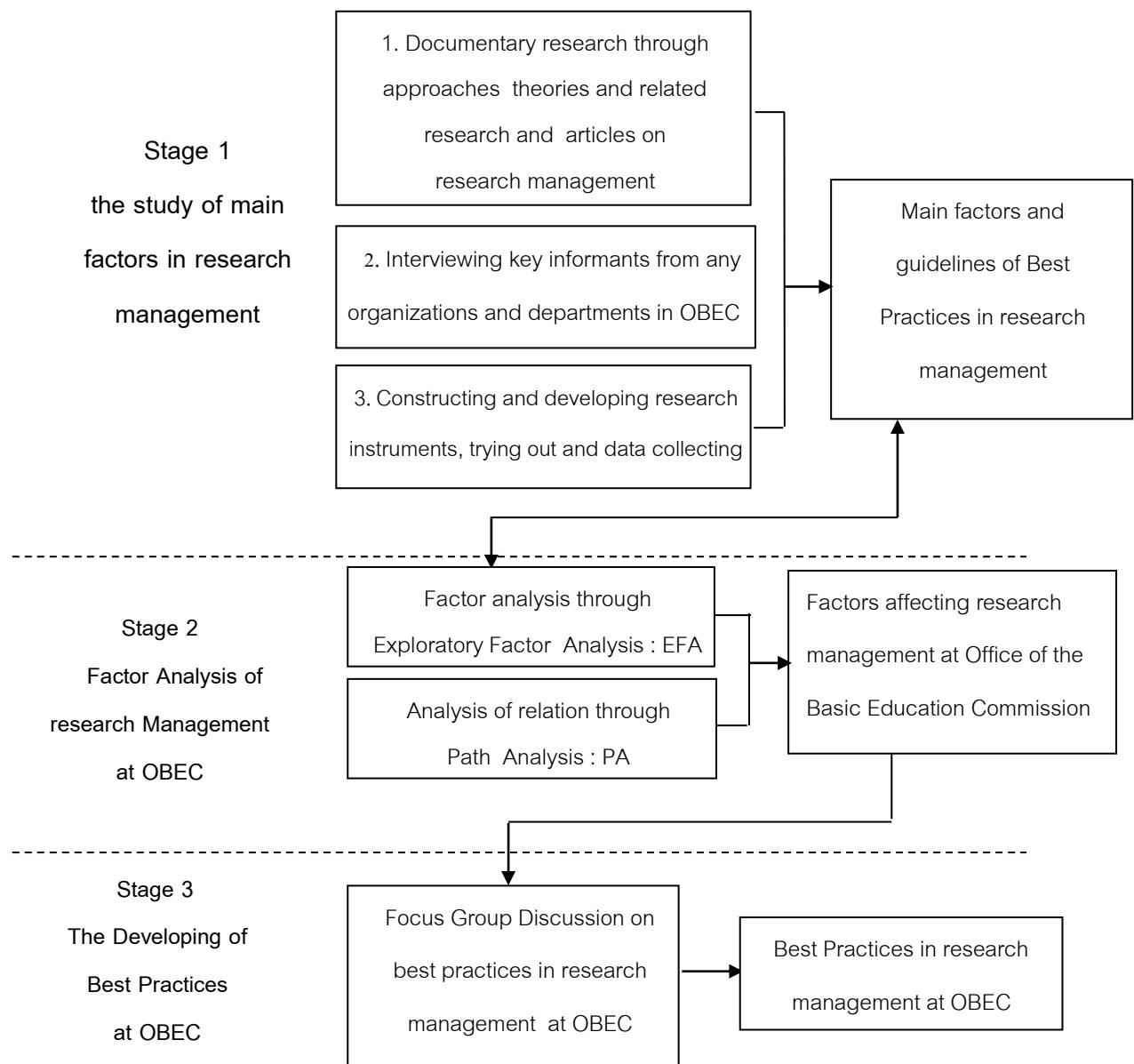


Figure 2 : The research procedure “The Best Practices in Research Management of Office of the Basic Education Commission”

Populations and Samples

Populations

The populations in this research included 3 classifying groups according to the research procedure namely:

Stage 1 : The populations are those of the 137 organizations and departments that enact the national research management, which were purposive sampling selected.

Stage 2 : The populations are those of 226 organizations and departments responsible for research projects. of Office of the Basic Education Commission that were affected by the research management namely: The Bureau of Education Innovation, 183 Office of Primary Education Service Areas and 42 Office of Secondary Education Service Areas. Data were collected from those who are supervisors, school administrators, and teachers which were purposive sampling selected.

Stage 3 : The populations are those of 3 organizations in group 1 and 2

Samples

The samples of this study are classified according to the research procedure namely:

Stage 1 : The samples are those of the 6 organizations that enact the national research management namely : 1) Office of the national Research Committee. : NRC. 2) The Thailand research fund : TRF. 3) Office of Education Councils : OEC. 4) Kasetsart University : KU 5) Suan Dusit Rajabhat University : SDRU. and 6) Office of the Basic Education Commission : OBEC. which were purposive sampling selected. There were 6 samples in total which were research specialists of organizations.

Stage 2 : The simple random sampling through Krejcie & Morgan Table was used to select 145 organizations under the supervision of Office of the Basic Education Commission affected by the research management . Those organizations are classified 3 unit of analysis namely 1) Academics or supervisors who are responsible for the research projects 2) school administrators and 3) teacher researchers who joined the project in cultivating the research culture. There were 435 samples in total.

Stage 3 : The organizations where research management were enacted and those under the supervision of Office of the Basic Education Commission. 15 samples were randomly selected and determined as 3 units of analysis, 5 samples each. The samples included 1) 5 administrators or representatives of organizations enacting

research management at the national level 2) 5 administrators of Office of the Basic Education Commission and 3) 5 supervisors or teachers who are responsible for the research educational areas

The Research Instruments

The research instruments used in this study included

1. Field notes of process to used for collecting data through documentary research and the 3 aspects of questions included 1) factors affecting the research management 2) research procedure, methods and guidelines for research conducting and 3) recommendations

2. The Semi-structured in-depth interview by were open- ended questions : 1) principles, approaches used in research management among organizations 2) roles, responsibility and practices in research management 3) the achieved research management and procedures 4) the best practices in research management among organizations and 5) recommendations in research management at Office of the Basic Education Commission.

3. The questionnaire included four parts namely : 1) general information of informants, : TRF. 2) questions on best practices in research management, 3) questions on factors affecting research management and 4) recommendations on research management at Office of the Basic Education Commission. The 5 levels of Likert scale questionnaire was developed through the documentary research and the expertise's interview. The content validity and the item objective index congruence (IOC) were also examined and selected by the level of index congruence at 0.5. The questionnaire was tried out and examined for reliability through Alfa-Coefficient by Cronbach. The reliability of 260 items, the second and third parts of the questionnaire are 0.993, 0.991 and 0.990 respectively.

Data Analysis

The analysis of data was categorized as follow:

1. The Means, Percentage and Standard Deviation were statistical methods used to analyze the data on questionnaires which compared to the criteria by Best & Kann as follow:

1.00 – 1.49 means the appropriateness at the level of the least

- 1.50 – 2.49 means the appropriateness at the level of little
- 2.50 – 3.49 means the appropriateness at the level of moderate
- 3.50 – 4.49 means the appropriateness at the level of much
- 4.50 – 5.00 means the appropriateness at the level of the most

2. The Exploratory Factor Analysis was statistical method used to analyze the surveying factors whereas Path Analysis was used to analyze the cause and effect factors

3. The Focus Group Discussion was the method used to find out the consensus on the best practices of research management at the Office of Basic Education Commission. After getting result from the data of factors analyst in state 1 and state 2 were main factors and the aspects of the best practices were confirmed by selected supervisors, teachers and educators from population in state 1 and state 2. by categorized through order to prioritize with the filter technique was used to eliminate the repetition of data and those of impractical.

The Frequency and Content Analysis were methods used to analyze and synthesize the data from 15 samples were randomly selected and determined as 3 units of analysis, 5 samples each. The samples included 1) 5 administrators or representatives of organizations enacting research management at the national level were enacted 2) 5 administrators of Office of the Basic Education Commission and 3) 5 supervisors or teachers who are responsible for the research educational areas

Conclusions

The research findings can be concluded that

- 1. The factors in research management at Office of the Basic Education Commission are those of
 - 1) the resource management for research : RMR
 - 2) clear principles, approaches, goals and methods : PGM
 - 3) communication for research through ICT : ICT
 - 4) participation from all sectors in promoting systemic research : PR
- 2. Factors of best practices in research management at Office of the Basic Education Commission included 100 factor variable which composed of 6 factors namely:

- 1) strategies in promoting research : SPR
- 2) principles, goals and guidelines for research management and research conducting : GGC
- 3) the structure of research management : SRM
- 4) creating researchers : CR
- 5) ICT system for researching : ICTSR
- 6) creating research and its implications CRI

The relationship among factors in research management and best practices can be shown in figure below:

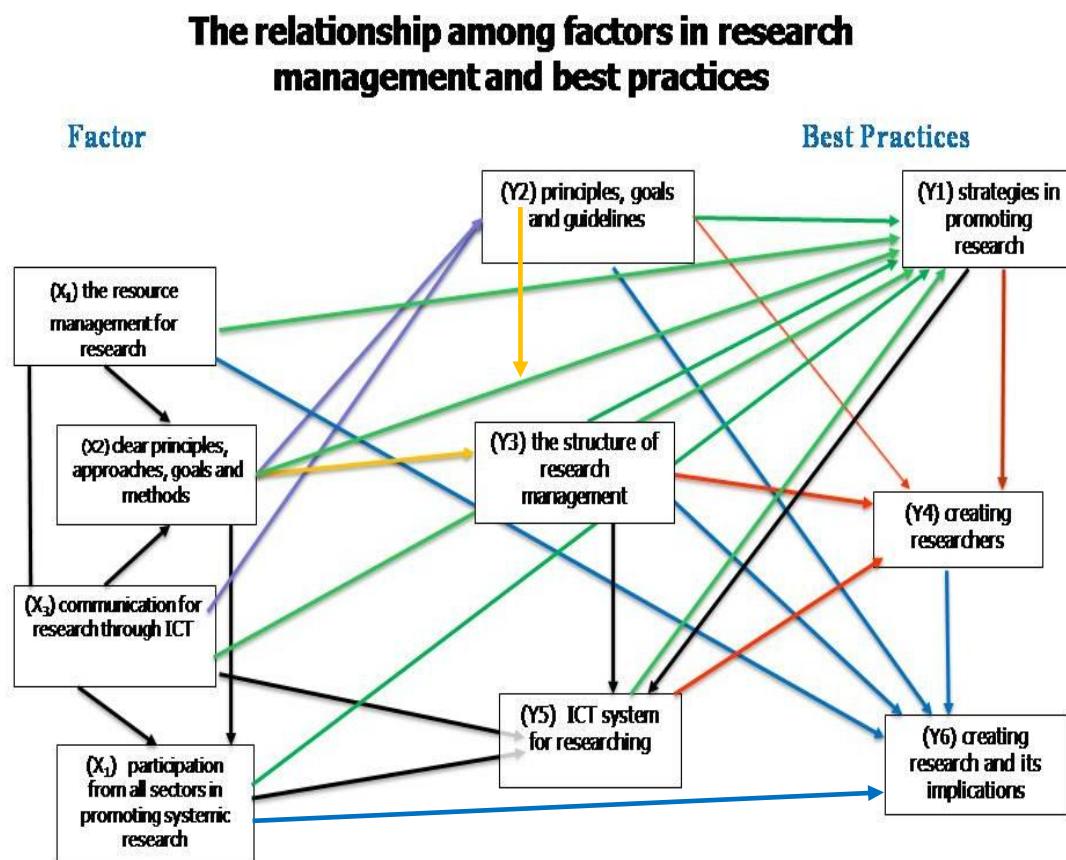


Figure 3 : The relationship among main factors in research management and the aspect of the best practices in research management at Office of the Basic Education Commission

3. The Best Practices in research management at Office of the Basic Education Commission included four factors are: The factors in research management at Office of the Basic Education Commission. It was concluded that the six factors are appropriate for the best practices in research management at Office of the Basic Education Commission at the level of 4.55 or at the percentage of 91. The best practices was synthesized as follows :

1. The structure of research management : The procedure of the best practices are

- 1.1 Assign the organizations responsible for research conducting
- 1.2 Determine the research department in the organization structure and in the line of command at all levels.
- 1.3 Determine roles, job description for the enactment of researching.
- 1.4 Seek the responsible administrators who are knowledgeable and skillful in researching.

2. Guidelines for the administration and the enactment of researching : The procedure of the best practices included

- 2.1 Determine the clear principles, policies, strategies, and trends in researching
- 2.2 Construct knowledge and understanding on how to enact the research management.

3. The Strategies for promoting of researching : the best practices include the following aspects.

- 3.1 Determine rationales and methods of research conducting.
- 3.2 Shift the research paradigm and its consuming.
- 3.3 Provide budgets or funders through variety of sources for the research promoting.
- 3.4 Promote the rationales and approaches in research projects.
- 3.5 Having more supporting system for research conducting
- 3.6 Build up research networking within government and private sectors through a variety of forms
- 3.7 Improve the data system or computer programmed that can be used for the whole system of researching

3.8 Evaluate the effectiveness of research management and develop for the increasing of research.

4. Promote researchers : best practices for the promoting of researchers include

4.1 raise awareness among personnel for the uses of research implications in finding the solutions and job improvement.

4.2 promote any of activities concerning researching

4.3 empower the strength on knowledge, understanding on research procedures among researchers for their self and professional development.

4.4 create research projects in the department level as well as recruit the new researchers within.

4.5 cultivate the consciousness as researchers on the researchers' ethics.

4.6 provide the researchers with awards and appraisals.

4.7 encourage researchers for the presentation as part of their job promotion.

5. Support the resources and information technology systems for researching :

5.1 provide adequate budgets for research promoting

5.2 develop the information technology system and learning resources concerning up to dated research.

6. Research creating and its uses. The best practices include the aspects below :

6.1 encourage the organization members in research conduct for their body of knowledge constructing.

6.2 encourage the organization members to do their jobs from routine to research.

6.3 encourage the members of organization for the uses of research results in finding solutions/ developing ongoing the jobs.

6.4 organize the symposium and knowledge management.

6.5 cultivate motives, morale supports for researching.

6.6 empower the researchers.

Discussions

The Discussions on the aspect of the best practices in research management are as follow:

1. The main factors of research management of Office of the Basic Education Commission are classified as multi-factors which categorized into 4 components. As resources management factor has 27 variables, Main Idea and clear objectives and research procedures factor has 11 variables, research communication by technology factor has 10 variables and participation from all sectors factor has 3 variables. The research results are based on the hypothesis set. Each factor directly affects to 6 components of the best practices, especially the main Idea and clear objectives and research procedures factor and research communication by technology factor directly affect the principles of good practice.

The factors of research management were resources management related to 4Ms Principle including Man, Money, Material, and Management. Research results are consistent with the "POSDCoRB" principles of Luther Gulick's. The second factor is main Idea and clear objectives and research procedures consistent with concept of Jessada Kasemset et al. who divide management technology systems into 5 ensure efficient operation: 1) Financial Management System 2) personnel management system. 3) database management systems 4) project management system and 5) monitoring and evaluating performance. The third factor is research communication by technology procedures consistent with concept of Jessada Kasemset et al. and Frederick Taylor. The fourth factor is participation from all sectors that is consistent with concept of Henri Fayol which offers some guidelines in dealing with the application of psychology in the management of the organization is OSCAR : 1) Objective 2) Specialization 3) Coordination 4) Authority 5) Responsibility.

2. The aspects of the best practices in research management of the Office of the Basic Education Commission are classified as multi-factors which categorized into 6 components including 1) The structure of research management, 2) Guidelines for the administration and the enactment of researching, 3) The Strategies for promoting of researching, 4) Promote researchers, 5) Support the resources and information technology systems for researching and 6) Research creating and its uses. Six components of the best are consistent with the 4 factors of research management,

concept of The seven successful of the McKinsey7s, Henri Fayol, Chester I Barnard, Stephen P. Robin, Murdoch University, Curtin University, Edith Cowan University, also research organization such as National Research Program Management and appropriate to implement the guidelines of the basic education Commission.

3. The best practices in the management of the Office of Basic Education Commission shows the results that have to develop the quality education system with 1) Policy and Promoting researching 2) Research management to pedagogy, and 3) apply research result to teaching & learning System. Principles of improvement to reach the best practices in research management are 1) Continuously to Implement the quality process of development 2) Development Routine job to research with standard, indicator, supporting researcher developing, reward for researcher who can Improve and Change of teaching and learning system. Implementing these guidelines need to be done with effectiveness and efficiency in each step.

Recommendations

The recommendations on best practices in research management are as follow:

1. The studying, collecting and publishing on best practices in research management that achieved the organizations' goals should be promoted and be the exemplars.
2. There should be more computer programs or the technology system that help eliminate the repetition of research projects submitted for getting grants.
3. The Office of the Basic Education Commission should launch and promote the best practices in action such as the adoption of rationales, research approaches, models, the encouragement of research in practice, the recruiting of researchers and the financial management.
4. The Office of the Basic Education Commission should encourage the organizations under their supervision to study the models, the research management for its uses in developing the education to achieve the goals.
5. There should be more studies on the forms of participation in research management in all any organizations under their supervision.
6. There should be more studies on the implication of best practices and then develop them into “Best of the Best”.

7. There should be the implementation of research results and the best practices in developing education quality among fast track schools for their qualities such as lab schools

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