

Factors affecting Research Development and Production of Academic Work amongst Lecturers of Mahasarakham University in moving forward as a Research University

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Abstract. This research aims to study actual conditions and guidelines in developing research and producing academic work amongst lecturers, to enable Mahasarakham University to move forward as a research university. In addition, the research also aims to study the condition of problems as well as factors that support research development and the production of academic work. The sample group of this study comprised university administrators, faculty/organization administrators, lecturers and university researchers, totaling 409 persons. The research findings revealed that the problems and factors for which lecturers required support from the university most were funding, remuneration and allocation of incentives. When considering each individual aspect, most problems found in terms of organization related to the formation of research groups based on faculties or majors. The most supportive factors found were meetings between researchers and university administrators in order to gain common understanding whilst the research was being conducted. In relation to personnel, most problems and supporting factors found were the composition of books, textbooks and teaching materials. With regard to resources, most problems found were related to publication/publicizing at national level, and most supporting factors found were insufficient research laboratories. In relation to funding, remuneration or allocation of incentives, most problems and supporting factors found were concerned with remuneration for academic positions.

Keywords: Factors affecting Research Development, Production of Academic Work amongst the Lecturers, Research University

1. Introduction

In 2008, there were 25 universities in ASEAN countries being rated in 500+ universities of World University Rankings 2008 prepared by Times Higher Education - QS. Among these 25 universities, there were 7 in Thailand, 2 in Singapore, 5 in Malaysia, 4 in The Philippines and 7 in Indonesia. It can be said that, besides Singapore, Malaysia was one of the countries that had earnestly supported the formation of a Research University in the past 3-5 years so that it could be rated in the world rankings. Malaysia was able to develop 5 universities that were rated in the ranking of 500+ universities (Mahasarakham University, 2010: 1).

For Thailand, universities have always been the largest entity to produce research work and personnel in the country. Figures related to research benchmarks on the international database called "Scopus" indicated that research work over 90 percent of the country came from universities, particularly the 7-10 leading universities of the country. (Office of the Higher Education Commission. 2009 : 1-10; and from the announcement of Thailand national research universities, Office of the Higher Education Commission.)

2. Problem statements

Mahasarakham University did not fall under ranking criteria and condition of national research universities, and there were only 9 universities rated as research universities. Therefore from the statistics of lecturers' research in the past, Mahasarakham University had less research on the international research

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database than other leading universities in Thailand, and its collection of researches was fairly small. The academic positions of lecturers in Maharakham University were also far below the quality assurance standard. The data from the Personnel Division of Maharakham University (Maharakham University, 2011) revealed that Maharakham University had a total of approximately 1,200 lecturers, 317 of whom were in the process of applying for academic positions. It was found that only 38 lecturers, or twelve percent, applying for academic positions were eligible to apply for such positions. Even though the University had introduced various forms of motivation for its lecturers to recognize and pay attention to research production and research work, it could not increase research to a satisfactory level.

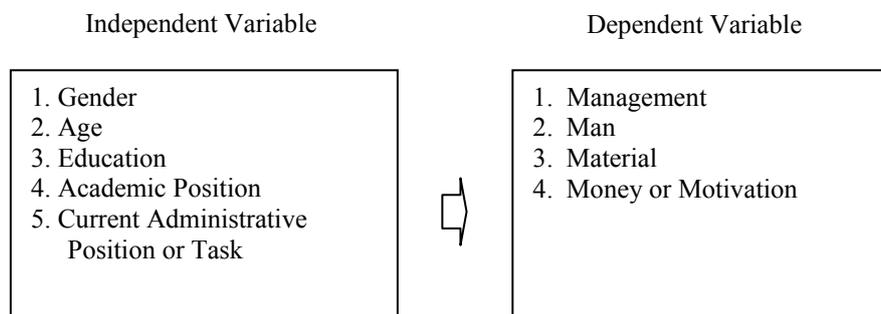
This research aims to use the concept of administration and the 4M principle of organizational management as a tool in studying problems and obstacles among lecturers with regard to the production of research and academic work in order to adjust the University's policy and allocate appropriate resources to the lecturers. The researchers consequently intended to conduct the study on research development and production of academic work amongst lecturers with the ultimate goal of enabling them to move forward in a Research University.

3. Objective

1. To study guidelines for research development and production of academic work of lecturers in moving forward to a research university
2. To study the condition of problems and the factors that support research development and production of academic work

4. Conceptual Framework

In studying factors affecting research development and production of academic work amongst the lecturers of Maharakham University in the move towards a research university, the researchers used a conceptual framework by implementing 4M management theory as follows: 1) Management, 2) Man, 3) Material, 4) Money, as listed below



5. Research Methodology

This was a quantitative research study and the sample group consisted of academic personnel including faculty/organization administrators, lecturers and university researchers totaling 409 persons. The tool used in this study was a questionnaire related to the study on factors affecting research development and production of academic work **amongst** Maharakham University's lecturers, in the move towards a research university. The researchers divided the questionnaire into 4 parts: respondents' general information; basic information relating to the production of research and academic work; opinion of factors that affect the production of research and academic work; and other comments and recommendations regarding factors that affect the accomplishment of research and academic work. The data analysis was carried out using computer software, and the statistics used in the analysis included percentage, mean and standard deviation.

6. Findings

Most questionnaire respondents were female aged between 26-35, having doctoral degrees, and working as lecturers without academic or administrative positions. The largest sample group answering the questionnaire was personnel from the Faculty of Science, who provided lectures for undergraduate students, had teaching experience in universities of less than 6 years, and were aware of criteria and period in applying for academic positions. The academic work that most lecturers prepared was teaching materials. The motivation for most lecturers producing research and academic work was that they wanted to upgrade their

knowledge/status and earn additional income. The reason that most lecturers were unable to produce research and academic work was because they had a heavy workload, the details of which are shown in Table 1.

Table 1 Priority of Reasons given by Lecturers unable to produce research and academic work

Priority	Heavy Workload		Small Compensation		Other	
	Number	Percentage	Number	Percentage	Number	Percentage
1	260	90.28	38	29.69	66	75.00
2	25	8.68	74	57.81	18	20.45
3	3	1.04	16	12.50	4	4.55

It was found that the reasons given were that the lecturers had a heavy workload (90.28 percent), compensation was too small (29.69 percent) and other reasons (75%). These included lecturers studying for masters' degree/preparing to pursue a doctoral degree, or having a heavy administrative workload, lacking support from their supervisors or lacking research funding, advisors or research equipment and tools, etc.

With regard to research development, the lecturers received research funding from the University's income; the largest amount received was more than 40,000 Baht while the smallest amount was between 10,001-20,000 Baht. Most research had been undertaken by one lecturer or by a group of lecturers. Regarding research publication, most lecturers had 5-15 articles published in national journals, and 5-15 articles presented in national Proceedings, the details of which are shown in Table 2.

Table 2 Information of Lecturers' Research Publication in a Period of three Years

Number of articles being published	National Journal		International Journal		National Proceeding		International Proceeding	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Fewer than 5 articles	399	97.56	398	97.31	399	97.56	402	98.29
6-10 articles	9	2.20	6	1.47	7	1.71	4	0.98
11-15 articles	1	0.24	3	0.73	1	0.24	2	0.49
16-20 articles			1	0.24	2	0.49	1	0.24
More than 20 articles			1	0.24				

From Table 2, it can be found that most lecturers had fewer than 5 articles published in national journals (97.56%) and in international journals (97.31%), followed by lecturers having 6 – 10 articles published in national journals (2.20%) and international journals (1.47%), and lecturers having 11-15 articles published in national journals (0.24%) and in international journals (0.37%).

Concerning article presentation, it was found that most lecturers had fewer than 5 articles presented in national Proceedings (97.56%) and in international Proceedings (98.29%), followed by lecturers having 6–10 articles in national Proceedings (1.71%) and in international Proceedings (0.98%), and lecturers having 11-15 articles presented in national Proceeding (0.24%) and in international Proceeding (0.49%).

When questioned about problems, most lecturers had problems in writing outlines or abstracts in English because they lacked English writing skills and had no skilled person to give them advice. Thus, most lecturers required the University to establish a center or unit to translate or review articles in English for the lecturers or researchers. Comments related to problems and factors affecting research development and production of academic work were summarized as shown in Table 3.

Table 3 Mean and Standard Deviation related to Problems and Factors affecting Research Development and Production of Academic Work

Aspect	Level of Problem Condition		Level of Problem	Level of Support Requirement		Level of Requirement
	\bar{X}	SD.		\bar{X}	SD.	
Management	3.45	0.6541	Moderate	3.70	0.6868	High
Man	3.64	0.7162	High	3.88	0.6826	High
Material	4.06	0.7086	High	4.17	0.6228	High
Money or Motivation	4.14	0.7283	High	4.24	0.6647	High
Total	3.78	0.5771	High	3.96	0.5285	High

Table 3 shows that the lecturers had overall comments related to problems in research development and production of academic work towards the top three aspects, which were money or motivation, material and man in high level. The lecturers also wanted factors to support research development and the production of

academic work in high level when considering each individual aspect in which the top three aspects can be listed from money or motivation, material and man.

7. Discussion

From the study on lecturers' opinions relating to condition of problems and factors supporting research development and production of academic work, it was found that the overall opinion was in high level. When considering each individual aspect based on condition of problems and factors supporting research development and production of academic work, it was found that the lecturers required the aspect of money or motivation in highest level, and also required supporting factors relating to the aspect of money or motivation in highest level as well. This was because the budget from the University's income, or funding to support research development and production of academic work was quite low when compared with a large number of University lecturers. Moreover, when the University had to allocate budget to all faculties and departments, the amount of funding to support research development and production of academic work decreased accordingly. The lecturers also received a small amount of funding from external agencies so lecturers lacked motivation to become interested in producing the research expected. This was in accord with the research of Planning Division, Mahasarakham University (2007), which stated that the top requirement in terms of research development and support among lecturers was the need for the University to allocate sufficient budget for actual expenses of research projects, and to increase funding to thoroughly cover research in all fields of subjects. This was also in accord with the research of Tantisriyanurak, et al. (2005), which stated that research funding in certain organizations was the top indicator to attract the interest of lecturers in producing research. This conformed to the research of Putwattana (2007), which stated that the innovation for development of research culture among lecturers was to provide a motivating system to boost morale and encourage lecturers to conduct research, and the research of Chaisuwan (2007), which stated that the factor contributing to academic positions of lecturers in private universities was motivation and attitude towards academic positions. The consideration on each individual aspect is shown below:

Management: The lecturers had overall problems in moderate level. The problem found most often was the formation of research groups according to faculties or departments. Concerning the requirement for supporting factors, it was found that the overall requirement was in high level. Most lecturers required supporting factors in terms of meetings between researchers and university executives in order to obtain harmonious understanding while undertaking the research. Most of them were new lecturers and had limited experience so lacked integration between various fields of subjects; they needed specialists and mentors to provide advice. The reason that lecturers required the executives to acknowledge problems in developing research was that the University had a limited number of knowledge exchange platforms for the executives and lecturers. Therefore, the University should create a positive atmosphere, conducive to research development and the production of academic work. This may include meetings to acknowledge research policy between the executives and lecturers, the provision of mentors or advisors to provide advice to new researchers, or knowledge exchange between well-informed persons who function as a committee to review academic work in order to stimulate interest among lecturers and researchers and motivate them to produce academic work.

Man: The lecturers had overall problems and supporting factors for research development and production of academic work in high level. The problem found most often was the writing of books, textbooks and teaching documents; lecturers had no time to conduct research and produce academic work due to their heavy workload and the increased number of students. The lecturers consequently became occupied with teaching tasks, thesis control, thesis proposal examination and thesis examination, so they had little time to think and write proposals to request research funding. Some lecturers had an administrative workload, and most lecturers placed more importance on teaching than researching because teaching brought a higher income. In addition, new lecturers did not have a knowledgeable person or specialist to provide them with advice. This is in accord with the research of Khiawkaew and Jenprapapong (2009), which reported that the problems in producing academic work among lecturers were related to workload and lecture preparation that required a lot of time, that university regulations were not conducive to research development and motivation, and that available research documents were inadequate and outdated.

Material: The lecturers had overall problems related to research development and production of academic work in high level. The problem found most often was national publication source. Supporting factors that lecturers required most were research laboratories, which were inadequate. The lecturers were unaware of national and international publication sources being well recognized in the academic world. In addition, publication of research in some international journals incurred high costs so that the funding that lecturers received was inadequate for publication. Research material and tools such as scientific apparatus

were also insufficient due to their expense, so the lecturers had to send their work to other institutes or agencies for testing, which was very inconvenient and time-consuming. Besides, a study source for conducting research on specific fields of subjects was also inadequate. This was in accord with the research of Naksewee, et al. (2007), which stated that material to support research, research equipment and facilities were insufficient to meet the needs of lecturers.

Money: In general, there were several factors that led to problems that lecturers faced during their research, development, and production of academic works. Compensation was a common issue for academic positions as the amount of funding for research, publication and distribution of academic works was quite small compared to the lecturer's income. In addition, it took long periods of time to complete both the research process and funding for the research. Furthermore, the process of official funding disbursement was slow and complicated. As a result, lecturers became discouraged in conducting research. Finally, there were many new lecturers who were inexperienced in conducting research so they did not gain much trust and recognition from the external funding sources. This was consistent with the research of the Planning Division of Mahasarakham University (2007), which stated that lecturers required the University to allocate adequate budget for actual costs of their research project, and increase the amount of funding for the researches of all fields and majors. Saruda Chaisuwan (2007) also stated that motivation was a factor contributing to the entrance into academic positions among lecturers. This was also consistent with the research of Pongpatcharin Putthawattana (2007), which stated that most lecturers viewed the income and compensation they had received from the University as quite small compared to income from extra lectures or consultancy. Also, the lecturers also had to responsible for academic services and other administrative tasks.

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9. References

- [1] Planning Division, Mahasarakham University. *Problems and Needs in Conducting Research among Mahasarakham University's lecturers*. Mahasarakham : Mahasarakham University. 2007, pp. 43-50.
- [2] C. Khiawkaew, and S. Jenprapapong. *Academic Works of University of the Thai Chamber of Commerce's Lecturers*. Bangkok: University of the Thai Chamber of Commerce, 2009.
- [3] T. Tantisriyanurak, et al. *Factors affecting Researches of King Mongkut's Institute of Technology North Bangkok*. Bangkok: King Mongkut's Institute of Technology North Bangkok. 2005, pp. 65-66.
- [4] P. Putwattana. *Innovation for the Development of Research Culture among Lecturers from Prince of Songkla University, Pattani Campus*. Faculty of Education, Prince of Songkla University, Pattani Campus. 2007, pp. 75-77.
- [5] S. Chaisuwan, *Factors Conducive to Academic Position of Lecturers in Private Universities*. Dissertation Ph.D. Nakhon Ratchasima: Vongchavalitkul Universty, 2007.
- [6] S. Naksewee, et al. Research Report on Attitude towards Research and Factors Conducive to Research of Personnel in College of Islamic Studies, Prince of Songkla University, Pattani Campus. Pattani : Prince of Songkla University, Pattani Campus. 2007, pp. 67-83.
- [7] Office of the Higher Education Commission. *Project for the Promotion of Research in Higher Education and Development of National Research Universities*. Bangkok: Office of the Higher Education Commission, 2009.
- [8] S. Chaisuwan. Factor Contributing to the Academic Faculty in Private Universities. PhD. Thesis. Nakhonratchasima: Wongchawaritkul University, 2007.