

## **Developing Knowledge Management Network of Teachers for Students of Faculty of Education, Mahasarakham University in Thailand**

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**Abstract:** This research was a part of the educational research network in upper-Northeast Thailand. The purposes of this research include: supporting the strategy for KM of Mahasarakham University, faculties, agencies, internal and external networks in terms of organization management and development, to collect knowledge organizations available within the Faculty of Education Mahasarakham University and outside the university which included networks within the focus group, individuals, documents, printed matters for systematic development and to adhere to sharing learning in education both outside and inside the university utilizing KM as an important instrument for human development and the development of occupation and organizations. Research results have revealed that participants as a whole showed satisfaction with the development of KM network of teachers for students at a high level. Every participant participated in performance based on his or her interest and had self-improvement and development. Everyone worked according to the functional roles of the KM center leading to operations which achieve goals, visions and missions. There occurred KM network of teachers for students which emphasized research, innovation and work development. Every organization group generated community knowledge managers. There were KM operations comprising: building, classifying, storing, implementing, sharing and evaluating knowledge. The focus groups showed their satisfaction with work operation as a whole at a high level. The factors of KM success of the community organizations included: enthusiasm about learning, leadership of the researcher and participants, participatory work climate, action learning and work mechanisms.

**Key words:** Knowledge management, network, education, teachers, Mahasarakham University, Northeast Thailand

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### **INTRODUCTION**

Learning is an important strategy for human development and the progress of a nation. It is a guideline for considering quality, job creation and competency in learning of people in the nation. Learning can create an important guideline for intelligence and is a determinant of a country's development for economic competitiveness, social development, art, culture and the survival of the nation at the international level. These are regarded as principles affecting education reform under the National Education Act 1999 and 2002 for human development to have quality and social development to sustain life-long learning society. Local administrative organizations, government, private sectors and all social institutes must cooperate with one another to originate learning at all times and places. The bodies of knowledge are built, improved and developed to be in accordance with each context and able to manage knowledge clearly. There are learning sharing from generation to generation and identical knowledge banks in individuals, work

institutions, community organization groups, abilities and visions. Attitudes of government officials, agency network, institutes and community organizations are adjusted to be more staff with continuous learning efficiency and to manage knowledge together to be more accepted. KM aims to increase development of effectiveness in decision-making. Creation of conditions of innovation will give the importance to human behaviors and will have most benefits from humans.

This is in accordance with article 11 of the Royal Decree on Rules and Good Methods of Country Affairs Administration 2003 which prescribes that learning government sections and innovative organizations must adjust themselves and learn to improve and develop their work in continuity. This can be achieved by having to perceive information and being able to compile outcomes of knowledge in different aspects for applying the outcomes to official work as well as having to promote, develop knowledge, abilities and visions. It is necessary to adjust attitudes of government officials, network of agencies, institutes and community organizations to be

staff with continuous learning efficiency. Also, they must manage knowledge together to be more accepted. KM aims to increase and develop decision-making effectiveness. And innovation condition-making will give the importance to human behaviors and will benefit from humans the most.

A pilot experiment on a project of educational knowledge management network of teachers for their students was initiated. The project is to be utilized as an instrument for human development, jobs, organizations and knowledge base in faculties, agencies and networks of Mahasarakham University. According to certifications of official work performance of Mahasarakham University in the annual fiscal year 2007. All the performance achieved the goals and produced good effects on work performance in organizational management and development. So, the university made the project for promoting and supporting KM network of teachers for students in Mahasarakham University organization and network in Mahasarakham Province. The project originated continuity and connection with identity. There was integration of manpower, work and organization in the form of the whole body of knowledge.

The purposes of this research include: to support issues of strategy for KM of Mahasarakham University, faculties, agencies, internal and external networks in terms of organization management and development, to collect knowledge organizations available within the Faculty of Education Mahasarakham University and outside the university which included networks within the focus group, individuals, documents, printed matters for systematic development and to adhere to sharing learning in education both outside and inside the university utilizing KM as an important instrument for human development and the development of occupation and organizations.

## **MATERIALS AND METHODS**

Research area included the University of Mahasarakham, institutions and organizations located within the province of Mahasarakham. Mixed methodologies were used. Research operations and proceedings encompass,

- Hold a meeting to explain guidelines for cooperation on educational resource utilization in the part of the Office of Mahasarakham Educational Service Area and Mahasarakham Non-formal Education Centers. Create a memorandum of cooperation among institutional agencies

- Provide workshop in terms of KM, learning organization and community, practitioners, After Action Record (AAR), participatory working, exchange of knowledge by presentations and shared learning in the forums, via website and Blog
- Provide additional training and advice about methods of KM to the network of teachers for students, agencies and network of the focus groups
- Form a working-team for operating the network of KM of teachers for students to influence the network of KM in the agencies of research conducting, department, projects, Faculty of Education of Mahasarakham University and focus groups outside the university
- Determine methods of KM implementation in organizations, departments, Faculty of Education of Mahasarakham University, network of the focus groups and there are operational follow-ups in continuity
- Provide knowledge sharing between agencies, departments, the network KM of teachers for students and the network of educational research in Mahasarakham in the form academic conference and academic works display/exhibitions twice a year
- Promote teaching-staff, administration, undergraduate and graduate students to attend learning in participatory project KM for adhering to the body of knowledge and extending future operational outcomes
- Make operational plans utilizing it as the basis for project evaluation
  - Determine stages and operational plans/research methodology by describing different activities which will be used in operation, experiment and detailed tests identify the needed requirements
  - A summary table is defined to layout the different activities to be used as a timetable for operation. The time to spend on each activity must be identified from the beginning to the end of the project

## **RESULTS AND DISCUSSION**

### **KM development**

**KM operation within Mahasarakham University:** The operation of developing the KM network of teachers for students could respond to the issues of the strategy for KM of Mahasarakham University in terms of management and development of organizations, research and quality of graduates to be true to the research purposes. There were parties of cooperation of the pilot department, staff in the

Faculty Network of Mahasarakham Educational Research, network of KM of teachers for students and the focus group. The operation of developing KM network of teachers for students in the Faculty of Education began the pilot operation in the Department of Educational Administration with 4 members of the teaching staff by building understanding and awareness of using KM as an instrument for developing staff, jobs and organization. Afterwards, there were outcome extensions to departments and the Faculty. The Faculty of Education staff cooperated well in KM within the Faculty. The Faculty dean presented a path to develop quality of the Faculty of Education. The assistant dean for research and academic service was matched with the assistant dean for staff for KM action learning to develop students and alumnus relations. The assistant dean for research and academic service determined the conceptual framework of education quality assurance by using KM as an instrument for developing staff, jobs and organizations together to make plans, act according to the plans, observe, take notes and reflect together with the pilot department once a month. Then, they made KM strategic plans in terms of quality assurance of the pilot department (Department of Educational Administration) based on the focus points with 10 indicators.

Products/impacts from KM operation included: there was a document on the path for quality development. There was a team of assistant deans who share learning about using KM as an instrument for developing staff, jobs and organizations. There was a path for quality assurance in the academic year 2007. There were teams of learning at the levels of faculty, departments and sections/divisions that increased from 9-17 persons. Also, the lectures in the pilot department presented their teaching-learning outcomes at an excellent level by using learner-centered teaching comprising 2 lecturers at the undergraduate and master's degree program levels. There were 3 meetings for planning and revising the plans to lead to action. These could originate strategic plans in terms of KM. As for quality assurance there were major and minor responsible persons leading to action learning based on the focus points of the subprojects.

**KM development outside Mahasarakham University:** The team of researchers built understanding and awareness of using research and KM as an instrument for developing staff, jobs and organizations as well as establishing research clinics and the Mahasarakham Educational Research Centers. Six research clinics were established at the faculty and department levels for developing jobs leading to specialization consisting of community strength and KM clinic, brain research, early-childhood

development clinic, science teaching clinic, fund mobilization for education clinic, educational administration research and development clinic and educational supervision clinic.

Established Mahasarakham Educational Research Network Center consisting of the following agencies: Faculty of Education of Mahasarakham University and Rajabhat Mahasarakham University, Mahasarakham Technical College, Mahasarakham Vocational Education College, Mahasarakham Physical Education and Recreation Institute, Offices of Educational Service Area Zones 1 and 2, specialist teachers, groups of career and technology and educational institution administrators and Mahasarakham Municipality Education Division, Province Administrative Organization and local administrative organizations. Community organizations focus group at Ban Nam Kiang and Ban Lao Rat Amphoe Wapi Pathum.

**Collection of knowledge:** There were presentations of 12 research articles which had passed action of the educational research network and for studies which had passed the KM network. The knowledge was recorded in documents supplement to the seminar on 12 August 2007. In the second meeting, there were presentations of 12 research articles of the KM network of teachers for students and for researchers of the educational research network. The knowledge was also recorded in documents in supplement to the seminar, on posters for dissemination and on website.

#### **Sharing the gained knowledge**

**Adherence to sharing the gained knowledge inside and outside the university:** There were academic meeting, presentations of research works, works display and exhibitions twice according to the established goal. There was one meeting on KM of teachers for students. The attendants provided the following guidelines for successful KM: holding a meeting to explain common concepts of using educational resources together, providing workshop on KM, learning organization, community of practitioners, after action recording, participatory working, sharing learning by presenting action outcomes and sharing learning in the forum and on website or Blog, providing additional training and advice on methods of KM of the network of teachers for students to agencies and the network of the focus group, formed a working-team to operate the KM network of teachers for students, determined the method of implementing KM in action in the organization, shared knowledge of agencies and promoted the teaching-staff, staff, undergraduate students and graduate students to learn the project participatory management.

**KM network development of teachers for students:** There was success in originating the expected outcomes. There occurred cooperation network parties of inside and outside university organizations in a concrete form because the researchers used the conceptual framework from an analysis and a synthesis of the concepts in the part of KM and the part of development techniques such as using the concepts of KM (Panich, 2005). Together with such different principles as AAR, raising questions about sharing learning on the real stage and the forum. Also, there were supporting mechanisms of KM. These could generate KM of departments and sections in an integrated way. Some significant evidence indicating success is in accordance with the concept of Wasi who say that manage to have research can appropriately create knowledge. There must be questions raising together, learning together, organizing knowledge to be in the form which can generate learning together, managing creation of knowledge and learning to lead to successful action, managing to have action evaluation for continuous adjustments and there must be management in creating researchers, creating knowledge managers and creating KM agencies.

There occurred significant individuals in the learning process. Four groups of knowledge managers were created: facilitators, group practitioners, note-takers and network managers. Creation of the management team began mainly from each individual. The organization members understood KM functional roles. The real knowledge manager was the foremost action official. The group of managers at the medium level acted as interpreters who transformed knowledge onto documents. The group of knowledge managers determined goals, created the work climate to help in sharing and subtracted knowledge to generate values (Panich, 2005). These knowledge managers responsibilities encompass promoting to generate activity, systematic and cultural knowledge sharing. Recording information in KM activities, narrations, summarized essentials of knowledge and took notes on meetings. Coordination with KM network among organizational groups.

There occurred action learning. The knowledge occurred from problems, queries and problem solving by real actions until the appropriate body of knowledge leading to KM according to interested issues. The interested issues include, knowledge creation, classification, storing, implementation, sharing and evaluation. There occurred the KM center as a driver of the groups to meet and share learning by having the KM center administrative committee follow up work development progress through monthly meeting stage and forum with websites on the Internet system as

sources of disseminating and storing KM outcomes and sources of sharing learning. This is in accordance with the concepts of who say that KM must rely on using information and communication technology to support and other instruments or technology used for KM (Nonaka and Takeuchi, 1995).

Research participants as a whole showed satisfaction with the development of KM network of teachers for students at a high level. Every participant participated in performance based on his or her interest and had self-improvement and development. Everyone worked according to the functional roles of the KM center leading to operations which could achieve goals, visions and missions. There occurred KM network of teachers for students which emphasized research, innovation and work development. This was a part of the educational research network in upper-Northeast Thailand. Any individual, organization, agency or institute that has agreed to coordinate and connect with each other under a particular purpose of agreement together systematically by having an objective for education reform, that group network must express as the beginning of performing activities together (Charoenwongsak, 2000).

In adherence and sustainability, Faculty of Education realized the importance of using KM as an important instrument for human development and the development of jobs and organizations. The faculty approved the project in the fiscal year 2008. Setting the ceiling of 100,000 Thai baht (about 2,942 U.S. dollars) based on the educational research network and KM of teachers for students project. There occurred a specialized research clinic in connection with administrators, teaching staffs, staff, undergraduate students and graduate students in working together. There were learning and transference of teaching work which could be put into real practice and applied appropriately to the context. The team of research participants had intention to work for the public to generate success according to the functional roles. This showed ownership of activities and work-plans. The team sought more cooperation from internal and external organizations. Provision of opportunities for these participants to participate in conducting the research from the beginning included participation in think, planning, action, checking and being responsible for research conducting. The organization and administration must have trust in the leader as having high absolute power and influence on the organization. If roles and responsibilities are understood and everyone cooperatively determine the assumptions for participatory working together, there will be effects on working together, having positive work climate and pushing them to achieve the goals (Sinlarat, 1999).

## CONCLUSION

Action learning is the way of life. New experience and the new body of knowledge occurred to help in real applications. There were connections with each other between persons and organizational groups. There occurred integrated KM and participatory research. Building knowledge in congruence with and appropriate to the Thai society was regarded as the way of self-reliance. Action and development of learning innovations were only in the aptitudes of the learners, could build the body of knowledge for solving problems, could live joyfully in the society and there was a trend toward sustainable development (Thinnalak, 2006).

Mechanisms that supported working together include the Faculty of Education KM Center, Community Organization KM Center by management of the team of research participants for follow-ups of operational progress of the community of practitioners, sections and departments to originate continuity, connection and relationships with each other. There were websites utilized as sources for seeking knowledge and disseminating KM outcomes. These centers were sources for storing and sharing knowledge of insiders and outsiders (Chantarasombat and Srisa-Ard, 2007). A Knowledge Management (KM) model for self-reliant communities consisted of community preparation; building motivations, awareness, participation promotion and building visions; making plans, developing team potentials, implementing plans in practice and work development and summary evaluation. Every organization group generated community knowledge managers. There were KM operations comprising of building, classifying, storing, implementing, sharing and evaluating knowledge. The focus groups showed their satisfaction with work operation as a whole at a high level. The factors of KM success of the community organizations included enthusiasm about learning, leadership of the researcher and participants, participatory work climate, action learning and work mechanisms of community organization KM centers.

## SUGGESTIONS AND RECOMMENDATIONS

The team of research participants are important knowledge managers at the department level and should first promote and support department administrators,

teaching staffs and department secretaries to operate learning together to determine goals and indicators of work development according to the internal and external purposes. The Faculty of Education KM center should promote and support to have a variety of research clinics with a change leader of each section and sharing knowledge on the monthly meeting stage and the forum by using website and Internet. The community of practitioners in the Faculty of Education still had limited facilitators.

There should be research and development of curriculum, activities, working-team competencies and research clinics depending on issues of interests together with graduate students in their programs of study and graduate certificate students majoring in project management and evaluation to be transferring work teaching to knowledge managers for local development to be efficient. There should be education quality research and development and total quality management at the department and faculty levels.

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