

KNOWLEDGE MANAGEMENT STRATEGIES FOR SCHOOLS UNDER THE ST. GABRIEL'S FOUNDATION OF THAILAND

Chamnan Laoruckphon¹

Nuntarat Charoenkul²

Abstract: The object of this study is to assess the knowledge management strategies for schools under the St. Gabriel's Foundation of Thailand. The researcher used descriptive research through mixed methods. The quantitative information and data were collected by using a questionnaire to discover the authentic state and the preferred state of knowledge management and key success factors for knowledge management of 15 schools under the St. Gabriel's Foundation. Qualitative information was collected from focus group discussion, interviews and questionnaires in order to formulate strategies. The strategies were verified, in terms of quality, by experts and school directors to study feasibility and appropriateness of the implementation of the strategies. The questionnaire was structured based on knowledge management and key success factors for knowledge management, in accordance with concepts, theories and operational definitions of knowledge management. and a focus group discussion amongst co-administrators, teachers and related staff. The quantitative data were analyzed in descriptive statistics by applying frequency, average and standard deviation, inferential statistics by applying t-test and ANOVA. The qualitative data were analyzed by content analysis.

In summary, the research findings showed that an authentic state of knowledge management was practiced at a high level. The preferred state was at the highest level; knowledge acquisition was practiced at a high level. Knowledge transmission and knowledge utilization need to be improved. The important problem was a lack of knowledge and understanding of knowledge management. The key success factors for knowledge management were information technology and leadership. Measurement and evaluation need to be improved. Knowledge management for schools under the St. Gabriel's Foundation of Thailand comprised 5 strategies as follows:

1. Formulating strategic plans of knowledge management at all levels of the organization,
2. Developing schools under the St. Gabriel's Foundation to be learning organizations for sustainable development,

3. Promoting the administrative structure, leadership and culture to facilitate knowledge management,

4. Developing an information technology system for knowledge management.

5. Creating internal and external networks to support knowledge management.

Each strategy had sub-strategies and policies/directions examined and certified in terms of quality by experts, with the average value at the highest level (between 4.51-5.00). From the evaluation of feasibility and appropriateness of implementation in schools by school directors, the value was at the highest level (between 4.51-5.00).

Keywords: Knowledge Management Strategies, Schools under the St. Gabriel's Foundation of Thailand

Background and Statement of the Problem

In the age of globalization, radical change is inevitable for individuals or organizations, alike. Change is the result of the constant development in science and technology which creates complications in various social systems and modes of operations, both, within and outside the organization.

Globalization has influenced all aspects of the social system: be it society, population, economy, science and technology, environment, or politics. Given this fluid phenomenon, organizations and agencies are required to revise their survival strategies and therefore strengthen themselves to withstand present as well as future changes. One principle means to achieve this is education. As a learning process, education is a problem-solving tool for society, enabling individuals to develop their potential in order to obtain career advancement and adapt to changes confronting the society. Therefore, education becomes the most effective tool in the nation's human resource development.

For this reason, many countries, including Thailand, need to formulate an education plan to keep pace with changes in the society. The current national education plan of Thailand (2002-2016) places significant emphasis on human resource development as stated in its objective No.2: Building Thai society to be a moral, intellectual, and learning society; and in its Action Plan No. 5: To develop a learning society by promoting knowledge management in all organizations at every level in order to boost the level of knowledge and learning of individuals and Thai society for sustainable development of the nation.

¹ Ph. D. Candidate in Educational Administration, Faculty of Education, Chulalongkorn University, Thailand

² Professor, Faculty of Education, Chulalongkorn University, Thailand

Schools under the St. Gabriel's Foundation of Thailand were established with a goal of developing quality youth for Thai society. Therefore, it is important for these schools to be aware of changes in society and hence be ready to rapidly respond to such changes. This mandate is in line with the National Education Plan for 2002-2016. It is also supportive to the National Economic and Social Development Plan No. 10 (2007-2011), concerning its policy to construct a learning society.

Although it is widely accepted that human resources are a key factor leading to the success of an organization, education has, in fact, made an indispensable contribution. With the current advancement of technology and information science, access to knowledge is more convenient than ever before. Therefore, the success and stability of an organization are dependent on knowledge that is dynamic, up-to-date, reliable, and uninterrupted. In an article, Pornthida Wichienpanya (2004) wrote that in a society that has a knowledge-based economy, knowledge is a priceless resource. Development and reinforcement of a new body of knowledge for competition is a key to build an important foundation for the development of a nation. It is widely accepted that knowledge management is essential in all types of work in an organization. An effective knowledge management approach brings about efficiency and benefits to the organization as a whole.

Accordingly, strategies must be formulated to ensure smooth and successful transformation of an organization into a learning organization, which emphasizes knowledge management. Good strategies, based on a critical analysis of the context and environment inside and outside the organization, allow the organization to be flexible to changes in a timely and appropriate manner. Decentralization, the approach currently used in the management of a modern organization, should be applied in strategy formulation. Hence, the formulation of a strategy involves an innovative analytical approach which breaks away from conventional problems of the past concerning limitations in human and financial resources. In other words, strategy formulation brings about challenges and initiatives in creating new options for the organization itself.

To survive in a globalized and learning-based society, the St. Gabriel's Foundation set its highest priority to knowledge management, as knowledge was a key determinant of success in any organizations. Efficient and timely knowledge management helps strengthen schools under the St. Gabriel's Foundation and pave the ways for greater success.

In the past, schools under the St. Gabriel's Foundation of Thailand tried to improve their organizations by applying knowledge outside the schools without paying much attention to their

existing resources in the form of knowledge normally accumulated and stored in individuals. That brought in problems which frequently arose when there was reshuffling or resignation of staff. For this reason, the idea of knowledge management became an appealing strategy which could be applied to solve or relieve the school's problems. When knowledge within the organization is compiled and stored systematically, it becomes a real asset of the organization that can be kept, passed on, and utilized for a long time. Schools greatly benefit from such systematic knowledge management.

With this notion in mind and provided that there was no development plan explicitly addressing the issue of knowledge management – either in terms of policy direction, strategy, or operational guidelines – for schools under the St. Gabriel's Foundation of Thailand, the researcher, as a member of the Counseling Committee of the Foundation, deemed it very beneficial to formulate knowledge management strategies that would be applicable to all its schools.

Research Objective

The research objective was to develop specific and appropriate knowledge management strategies for schools under the St. Gabriel's Foundation of Thailand.

Conceptual Framework

The conceptual framework took shape from the knowledge management concepts and strategies publicized in the National Education Plan. Such concepts were used to formulate strategies for schools under the St. Gabriel's Foundation of Thailand. These included:

1. The National plans that was relevant to knowledge management in educational institutions; e.g. The 10th National Social and Economic Development Plan (2007-2011), National Education Plan (2002-2016);

2. Knowledge management that meant a systematic management process, covering the processing of data, information, ideas as well as experience of an individual who possessed both, tacit knowledge and explicit knowledge, from inside and outside schools. This process would eventually lead to the construction of a new body of knowledge to be applicable to any kind of task and to be stored in a manner which allowed accessibility of the information to those in need of it for future reference. This new body of knowledge was to be disseminated and applied systematically.

As stated by Marquardt (1996), Trapp (1999), Probst et al. (2000), Kucza (2001) and Sveiby (2003), the process of knowledge management consists of four elements:

2.1 acquisition of knowledge - a process covering both identification of knowledge desired to acquire and the actual knowledge acquisition. Such knowledge could be acquired either from within or outside schools. It was driven by a need for additional information that benefited the school personnel who become open-minded and active learners, with the desire for new and dynamic knowledge that would bring about the utmost benefits to themselves and the organization.

2.2 development of knowledge – a process in which a group of personnel worked co-operatively in any activities relating to development of knowledge by improving personal knowledge or knowledge found in schools, both tacit and explicit. Such knowledge should be innovative, upgradable, and transformed to be of the highest value. The result would be new knowledge of greater benefits, more value-added knowledge, innovative concepts or new theories.

2.3 storing and retrieval of knowledge – a process in which information is verified, maintained and arranged in a systematic manner to be ready for use. It also included the methods of maintaining and categorizing data to be more accessible and conducive to the utmost benefits.

2.4 transfer and application of knowledge – a process in which knowledge is transferred, disseminated, and shared at the individual or the organizational levels for the purpose of planning, decision-making, or problem-solving so that the application of existing knowledge could be most profitable, efficient and effective.

3. Factors conducive to knowledge management – a combination of the essential factors which influence success or failure in knowledge management of an organization. As cited in Authur and APQC (1996) O'Dell (1996) and Boondee Boonyakit (2005), these factors are as follows:

3.1 Leadership – the ability to influence behavior of the personnel in an organization in the same direction, the ability to convince or motivate the personnel to change behavior in line with the needs of an organization, relating to knowledge management.

3.2 Organization Culture – a culture conducive to knowledge management; i.e., a culture of exchanging and sharing knowledge in the organization, love and commitment to the organization, love and trust in one another, treasuring success, team work or cooperation, and recognition of other person's knowledge. Positive organization

culture helps strengthens the organization and functions as a driving force towards a thriving organization which could achieve its goals.

3.3 Information Technology – electronic appliances, supporting the knowledge management activities, and their know-how, used in the information management process, i.e. collecting, compiling, processing, publicizing and applying the knowledge. Information technology facilitated a search and retrieval of knowledge for data analysis, promoting efficient information management in an organization.

3.4 Infrastructure – a *tangible support system* (e.g. buildings, tools/ appliances) and an *intangible support system* (e.g. knowledge exchange, organization or unit structure personnel in charge of knowledge management, including resource human management, such as performance evaluation, recognition and awarding systems.)

3.5 Assessment and Evaluation – an operation to allow an organization to have an overview of the present status of the progress and outcome, compared to the set targets, in order to review, evaluate, and adjust strategies or activities to achieve the goal of knowledge management.

4. Process of strategy formulation – a proactive approach in the operation of knowledge management for an organization to manage knowledge efficiently and systematically. This would solve problems and improve operation in the organization. Strategies should be diversified for personnel to use as directions in their work for the organization to achieve the set goals and to have a competitive edge in a changing environment. The important elements include 1) information for the formulation of strategies; 2) strategy formulation, tactics or directions, and methods or tools.

5. Knowledge management strategies for schools under the St. Gabriel's Foundation – a study of the current and the desired states of knowledge management in schools under the St. Gabriel's Foundation of Thailand. This was followed by the formulation of strategies to be implemented at the organization level, while specifying the modalities and directions of knowledge management to achieve the desired outcome.

The process of formulating strategies for schools under the Foundation comprised the two key steps: 1) environmental scanning and SWOT analysis^{*}; and 2) strategy formulation.

* A study undertaken by an organization to identify its internal strengths and weaknesses, as well as its external opportunities and threats.

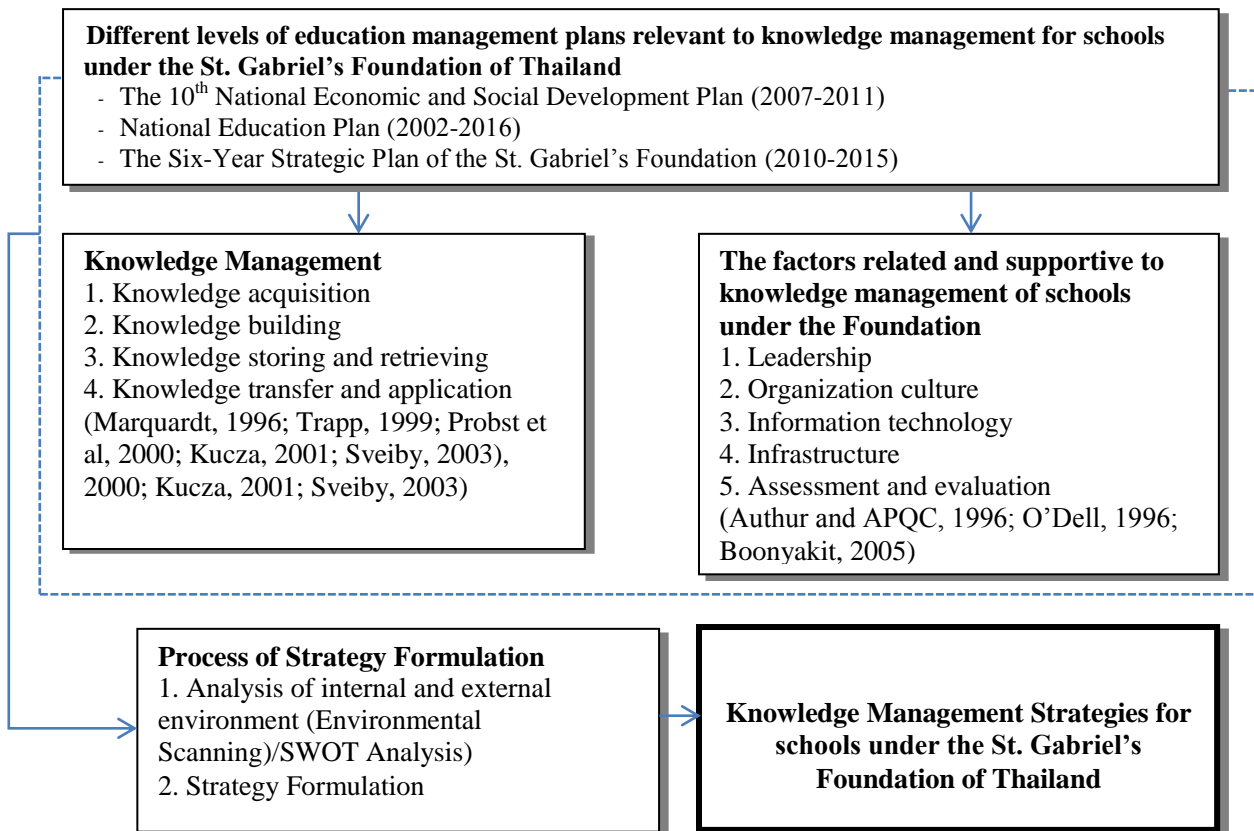


Figure 1: Conceptual Framework of Knowledge Management Strategies for Schools under the St. Gabriel's Foundation of Thailand

Research Methodology

A mixed – methods approach was applied in this research to obtain both quantitative and qualitative data. Questionnaires, group discussions and interviews were used to extract information on the current and the desired states of knowledge management in schools under the St. Gabriel's Foundation of Thailand, including the factors affecting knowledge management in these schools.

The data were used to formulate strategies, which were subsequently assessed by the experts and the school administrators to evaluate feasibility and potential for success.

The research methodology was divided into four phases:

1. Specification of the Research Framework.

The researcher studied the relevant research and literature relating to the management of schools under the St. Gabriel's Foundation of Thailand, knowledge management, strategy formulation and relevant education plans. After that, the researcher defined the terms “knowledge management” and the “factors affecting knowledge management” in order to specify the research framework for the development of knowledge management strategies for schools under the Foundation.

2. Study of the current and the desired states of knowledge management and the factors affecting it.

Data were collected using questionnaires, interviews of school administrators and group discussions to find out the information on the internal and external environment related to knowledge management within and outside schools under the Foundation, and to identify the factors affecting knowledge management in these schools.

3. Formulation of knowledge management strategies for schools under the Foundation.

Information obtained from phase 2 was integrated into an analytical process to determine strengths and weaknesses, opportunities and threats of schools under the Foundation. The results were then used to formulate a draft set of knowledge management strategies for the schools.

4. Evaluation and validation of strategies.

Experts evaluated the draft strategies from phase 3, using an assessment questionnaire to determine its validity. Additional suggestions were also used to modify the strategies. The revised strategies were then passed on to all school administrators to assess its suitability and feasibility for implementation.

Research Findings

1. The states of Knowledge Management

The research explored both the current and the desired states of knowledge management in schools under the St. Gabriel's Foundation of Thailand.

It was found that all the four aspects of knowledge management (namely, knowledge acquisition, knowledge development, knowledge storing, and knowledge transfer and application) were practiced at a high level, while the desired stage was the highest level. The perceived difference between the actual and the desired states indicated the "common desire" of the school administrators, co-administrators, teaching and other staffs to improve knowledge management and the related factors affecting knowledge management in schools under the Foundation.

As knowledge management was a key factor in school development, if school personnel could efficiently apply their tacit knowledge, they would bring about highly positive effects on organizational advancement. Recognized as a process of human resource development, a knowledge management scheme for schools under the Foundation was responsive to the Six-Year Strategic Plan of the St. Gabriel's Foundation of Thailand (2010-2015) and the present National Education Plan (2002-2016), in which some significant issues were addressed. Such issues concerned development of the country to be a learning society moving towards a knowledge-based economy, equality of access to life-long learning and training opportunities, and a system that equips people with the intellect that would enable them to build careers, generate income and help the nation overcome social and economic crises.

2. Factors related and supportive to knowledge management

The study found that all the five factors related and supportive to knowledge management (i.e. leadership, organization culture, information technology, infrastructure as well as assessment and evaluation) were all practiced at schools in the St. Gabriel's Foundation. The *present* state of operation was rated "high", whereas survey respondents indicated that the *desired* state was at the "highest level."

Overall, when the actual operations on different factors were compared, the highest operation was in the areas of leadership and information technology, while the lowest was performance assessment and evaluation. In general, leadership was ranked the highest, in comparison with other factors. In particular, school administrators gave the highest priority to a knowledge management policy and related activities in schools. Also, they should serve as a driving force towards exaltation of knowledge management as an essential task for each office/unit, allocation of sufficient resources and finding out solutions for any problems.

3. Knowledge Management Strategies for schools under the St. Gabriel's Foundation of Thailand

Based on the research findings, five key strategies emerged as follows:

Strategy 1 – Formulating strategic plans of knowledge management in all levels of the organization.

Strategy 2 – Developing schools under the St. Gabriel's Foundation to be learning organizations for sustainable development.

Strategy 3 – Promoting an administrative structure, leadership and culture to facilitate knowledge management.

Strategy 4 – Developing an information technology system for knowledge management.

Strategy 5 – Creating internal and external networks to support knowledge management.

The details of each strategy are as follows: (see figure 2 in next page)

In short, the knowledge management strategies for schools under the St. Gabriel's Foundation of Thailand consisted of significant elements according to the concept of Moslehi (2004), who proposed a conceptual framework covering elements of knowledge management strategies and suggested that an organization was supposed to begin by defining its goals for knowledge management, which was consistent with what was stated in Strategy 1. Then the organization further developed strategies that support those desired goals. The major components of such strategies should comprise the process and content of knowledge management, which conforms to Strategy 2, including the success-driven components: people, organization and technology, as reflected in Strategies 3-5 and supported by Leitch and Rosen (2001) and Collison and Parcell (2004) who researched the success of knowledge management and found that it required three factors: people, process and technology. These three factors function together to bring about success in knowledge management.

Discussion

In the state of knowledge management the result of priority need assessment of the present state of knowledge management, using PNI modified, revealed that school administrators and co-administrators shared the same view that priority should be given to knowledge storing and retrieving, whereas teaching and other staffs put more importance on knowledge transfer and application. Therefore, school administrators and co-administrators should take this into consideration in their quest for a common concept and guidelines acceptable for all the organization members, so that strategies could be implemented more effectively.

In the factors related and supportive to knowledge management the result obtained from PNI

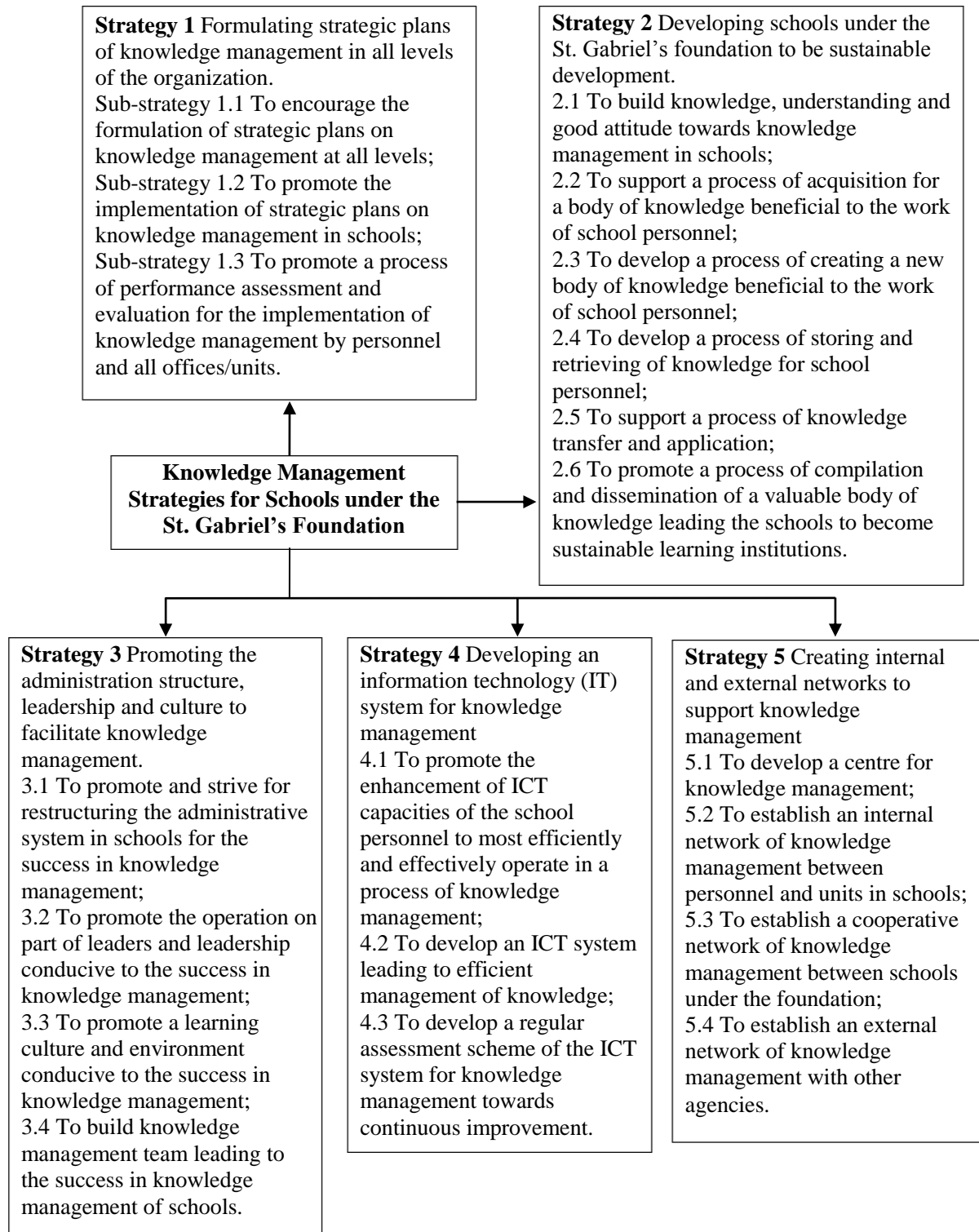


Figure 2: Knowledge Management Strategies for Schools under the St. Gabriel's Foundation of Thailand

modified analysis disclosed that school administrators and co-administrators shared the same view that priority should be given to assessment and evaluation, whereas teaching and other staffs put more importance on infrastructure. Hence, school administrators and co-administrators should bear this

in mind to probe into the aspects on which the two groups had different views, e.g., the aspect of motivation and incentives in which school administrators and co-administrators believed to be sufficiently and appropriate in the present state, while teaching and other staffs considered it insufficient and

needing more concentration. These aspects should be used to modify strategies to be more responsive to the desired outcome of the schools and to the need of their staffs.

Recommendations

The following recommendations on the application of strategies to schools under the St. Gabriel's Foundation of Thailand are to be translated into action by two offices: the Foundation's Department of Education and Department of Information Technology and Communication, and by schools under the Foundation.

1. The Foundation's Department of Education Should:

1.1 define a policy to promote and provide appropriate support for all schools to effectively operate knowledge management under the same direction. This could be in the form of a uniform model for storing the desired knowledge, a knowledge database system, a strong infrastructure, a unit in charge of knowledge management, an efficient technology system to support knowledge management, a rewards system, a system of storing and disseminating a body of knowledge leading to benefits, both in the tangible and intangible forms, at the school and the Foundation levels.

1.2 have a policy to encourage school administrators to participate in training on knowledge management, so that they understand and be aware of its importance,

1.3 have a policy to promote the development of school personnel to be equipped with knowledge and skills to efficiently and effectively operate the activities related to knowledge management. Moreover, they should be aware of the importance and benefits of knowledge management for driving the schools towards learning organizations.

1.4 hire a resource person with expertise in knowledge management to provide guidelines and suggestions to ensure that knowledge management is operated correctly and appropriately so that it can achieve the desired goals. This would bring about benefits to the schools and achievements in accordance with the Foundation's knowledge management strategies.

2. The Foundation's Department of Information Technology and Communication

should apply the information and communication technology system to any activities related to knowledge management both at the school and the Foundation levels, by designing fundamental structures for storing, disseminating and retrieving knowledge. These activities would lead to efficiency and effectiveness of the operations on knowledge management.

3. Schools under the St. Gabriel's Foundation

Schools under the St. Gabriel's Foundation should apply the research findings to formulate knowledge management strategies for their institutions.

Suggestions for Further Studies

It was further recommended that further studies be conducted in the following areas:

1. The implementation process of the knowledge management strategies in schools under the St. Gabriel's Foundation of Thailand should be further analyzed to provide feedback information to further improve the strategies.

2. Action research should be conducted to develop an efficient system or model of knowledge management for schools under the Foundation. The models would be applied in any schools under the Foundation and other schools with a similar context.

3. An in-depth analytical study should be conducted on the factoring affecting success and failure in knowledge management.

4. A study should be conducted concerning a strategy development model of knowledge management for schools under the St. Gabriel's Foundation of Thailand to explore its possible application to schools with similar surroundings.

References

- Bixler, C. (2000). *Creating a dynamic knowledge management maturity continuum for increased enterprise performance and innovation*. Washington: George Washington University.
- Boyett and Boyett. (2001). *The Guru Guide to the Knowledge Economy*. New York: Wiley, 2003
- Choi and Lee. (2003). Knowledge management enables, processes, an integrative view and empirical examination. *Journal of Management Information Systems* (January 2003): 179–228.
- Gold, A. (2002). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems* (January 2002): 185-214.
- Grover, V., and Davenport, T. H. (2001). General Perspectives on Knowledge Management: Fostering a Research Agenda. *The Journal of Management Information Systems* (January 2001): 5-21.
- Keyser, R. L. (2004). *Assessing the relationship between knowledge management and plant performance at the Tennessee Valley Authority*. Alabama: The University of Huntsville.
- Klaus and Other. (2004). *Content Analysis: An Introduction to Its Methodology*. Edition 2 Illustrated. USA: Sage.
- Marquardt, M. J. (2002). *Building the Learning Organization: Mastering the 5 Elements for Corporate Learning*. 2nd ed. U.S.A: Davies-Black Publishing.

- Martin, J. S. (2004). *Enhancing and inhibiting interactions between business processing and knowledge production: A macro study of leadership and knowledge processing in higher education*. Clemsom University.
- Moslehi, Adel. (2004). Proposing a systemic view to intellectual capital measurement. *IT and Financial Management Conference Tehran*. University of Iran.
- Nickols. (2000). *The Knowledge Management Yearbook*. 2000-2001 ed. U.S.A.: Butterworth-Heinemann
- Nonaka I. and Takeuchi H. (1995). *The Knowledge creating company: How Japanese companies create the dynamics of innovation*. New York: Oxford University Press.
- O'Dell, Grayson and Essaides. (1998). *If Only We Knew What We Know: the Transfer of Internal Knowledge and Best Practice*. New York: Free Press.
- Pettinger, R. (2002). *The learning organization*. Oxford: Capstone.
- Probst, G. Raub, S. and Romhardt, K. (2000). *Managing knowledge: Building Block for success*. Chichester: John Wiley & Sons.
- Senge, P. M. (1998). *The fifth discipline challenge: mastering the twelve challenges to change in learning Organization*. London: Century Press,
- Smith et al. (2007). *Management research*. London : QED.
- Wiig, K. M. (2002). Knowledge management in public administration. *Journal of Knowledge Management* (July 2002): 224–239.