Scenarios of Rajamangala University of Technology Isan in the Next Decade

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Abstract: This research aimed to study the scenarios of Rajamangala University of technology Isan in the next decade, covering four aspects of University tasks including learning and teaching management, research, academic services, art and cultural maintenance. The study was conducted by Ethnographic Delphi futures Research from the study of opinion of the experts who were stakeholders of Rajamangala University of Technology Isan. Three mixed methodologies were used in conducting the study: document syntheses, quantitative research and qualitative research. The results of all three methodologies revealed the following: the scenarios of Rajamangala University of Technology Isan in the next decade in learning and teaching management aspect would be growing a number of graduate study curriculum and science and technology curriculum, it was the instruction for lifelong education. Research aspect expects that lecturers should be self-developed by creating their researches and innovations for the developing foundation. Academic service aspect involves direction and planning of service for society systematically and cooperation with both government organization and non government organizations. Art and cultural maintenance aspect includes proactive policy and planning. The university should open to every sectors to participate and define university's developing strategies, throughout graduate students production and development. Scenarios of Rajamangala University of Technology Isan in the next decade will develop for its goals the attainment in four keys, which may be briefly presented as follows: excellence in teaching and learning and staff development to obtain higher qualification in Master and Doctoral degree. Equity opportunity and accessibility to higher education is the right of all people. The system will be fair and lifelong learning will be promoted i.e., staff can study all the time. The efficiency will also includes the ability to respond to the country's needs and to produce enough engineers. In terms of internationalization; Rajamangala University of Technology Isan has the roles in relation to other academic institution especially, those of their neighboring as Laos, Cambodia, Vietnam, which have sent their students to study at Rajamangala University of Technology Isan. In summary, the advantage of the research will appropriately plan and develop for Rajamangala University of Technology Isan in the next decade.

Key words: Scenario, Rajamangala University of Technology Isan, next decade, academic services, cultured

INTRODUCTION

History of education in Thailand was primarily provided by the religious and royal institutions. Basic education given by Buddhist monks to only boys in classes set up within the compounds of monasteries. King Rama V (1868-1910), who recognized the need to provide education for staff in the growing bureaucracy. Therefore, Thai education system was modernized and made more accessible to the general public, Education Proclamation began in 1898, following the British system and two educational paths were stipulated: the academic and vocational education.

According to the National Scheme of Education (1992), the structure of the Thai educational system was composed of five levels: 3 years of pre-primary education, 6 years of primary education, 3 years of lower-secondary education, 3 years of upper-secondary education (in the field of both general and vocational education) and higher education.

Educational approaches are classified as formal, non formal and informal. Formal education was mainly provided within school system, basic and higher education and other types of institutions (Rose and Kirk, 2001). Education in Thailand was reformed in August 1999, aiming for the full development of

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Thai people based on a life-long and continuous process as well as student centered learning approach.

Higher education in Thailand dated back to late 19th century when King Rama V started to modernize the country. Highly qualified professionals were needed to engage in the civil service. Subsequently, law, medical and engineering schools were established to produce trained personnel for the Siamese government service. The country also saw the first comprehensive Thai university, which was upgraded from the Civil Service College in 1917. It was named Chulalongkorn University after the late King Rama V several specialized universities were later established in Bangkok after the revolution in 1932, namely, Thammasat University in 1933 and Mahidol, Kasetsart and Silpakorn Universities in 1942. The main purpose for developing higher education in the early period remained unchanged i.e., to produce manpower for the civil service.

The discussion shows that the rapid changes of the recent world, the expansion of free trade system and integration of economic to create power of bargaining in Region Level led to new economy, which was necessary to apply knowledge as a major factor in creating the economic growth and permanent development (Brinkman and McIntyre, 1997). Only knowledge-based society and continuous training could develop people's potentiality to keep pace with those changes (Daft and Weick, 1984). Asia-pacific-cooperation of which Thailand was a member specified the framework for cooperative link between the study of human resource development and economic cooperation. The framework clearly focused on the educational reform in instructional effectiveness in school and high quality of vocational training in order to create income for people to keep pace with globalization and new socio-economic, the increasing competitiveness affecting people's living status.

To serve the world changing trend and policy of international collaboration and intention of the constitution of Thailand 1997 and the additional issue, the Ministry of Education specified moving strategy of the new university to prepare man power in basic and medium level in various fields of technique relevant to the enterprise and labor market focusing on University of Technology for producing manpower as the country need in subject, field, skill and ability of students with collaboration of organization, which needed to use manpower from the section of producing, private, public and community to create clear collaboration process as well as promoting the University of Technology. The important measure of strategy for adjusting the administration and management system as developing collaboration system so that the students could have theoretical knowledge and practice.

Asian countries prepared for a major effort to achieve education for all by the end of the century. The new strategy paradigm were getting to the future first by competing to shape future industry structure, maximizing the rate of new market learning and minimizing the time to global pre-emption. Thailand had reformed education to new strategic paradigm and management for quality and efficiency.

The educational management in higher education level aimed to create and maintain spirit and academic progress in order to apply academic excellence for developing people and providing academic service for benefit of society and humanity (Srisaan, 1980). Therefore, the role of university as higher education institute is to initiate in searching for knowledge as well as transferring knowledge to other to gain more knowledge and apply knowledge for leading society (Suwanwela *et al.*, 1986). The good quality of graduate study depended on graduate study management in administration, curriculum, library, information technology and modern media (Sinlarat, 2000). All Thai universities in four aspects: learning and teaching management, research, academic service and art and cultural maintenance.

To serve the world changing trend and policy of international collaboration and intention of the constitution of Thailand 1997. The Ministry of Education specified the strategy of specific university to prepare man power in basic and medium level in various fields of technique relevant to the enterprise and labor market focusing on University of Technology for producing manpower as the country need in subject, field, skill and ability students with collaboration of organization, which needed to use manpower from the section of producing, private, public and community to create clear collaboration process as well as promotion the specific university. As a result of the growing interdependence on a world scale of international and national economics and the need to adopt a global approach in order to sharpen the competitive edge of the country, a number of prominent social critiques as well as educators have voiced their concerns for the quality of Thai higher education (Jossey *et al.*, 2001).

Rajamangala University of Technology Isan was established by Rajamangala legislation in 2005, which is new university group and was a local educational institute developing from technology and vocational college, Rajamangala Institute of Technology, Rajamangala University of Technology Isan provides service for people in the upper part of Northeastern Region especially Khon Kaen province, Kalasin province, Surin province, Sakonnakhon province and Nakornrachasima province with an implementation under the changing situation of the globalization world and Thai society in

social, economics, politic, environment and technological aspects. These trends affected the very part of society as well as Rajamangala University of Technology Isan as well. According to situation of world globalization, many kinds of changes were rapid and unstable. The information and technology progress and computer science caused the recent world to adapt itself to the world age of learning society (Martelli, 2001). It was necessary to encourage potentiality and capacity in competing and developing human power by management of the Education Reform in order to gain human resource with quality, ability for self developing society, locality and country in many aspects to progress to 21th century firmly and to be highly dignified.

The current evaluation and future trend of higher education management, Rajamangala University of Technology Isan was renovated as local higher education with a major role in producing man power in moderate and high level. Besides, the university was organised, following the specification of the University Act by teaching in diploma level and Bachelor's degree for >40 years. The major fields offered were science and technology in engineering, agriculture, fishery, administration. Rajamangala University of Technology Isan has developed a master of zoology and computer in 2008. In terms of the instructional management in graduate study, Rajamangala University of Technology Isan, focuses developing potentiality in thinking and ability in independent academic searching by as well as the ability in studying, searching, conducting research in order to find solutions for different questions using correct techniques based on academic rationale and the ability in proposing information for others with different levels of competency to understand.

There are some problems in learning and teaching management, research, academic services, art and cultural maintenance. Rajamangala University of Technology Isan has five campuses namely; Khon Kaen campus, Surin campus, Kalasin campus, Sakonnakohn campus and Center in Nakornrachasima and these campuses have different context.

According to the recent and future conditions above, Rajamangala University of Technology Isan has developed its potentiality to offer a more variety of curriculum both in Master and Doctoral degree. It is necessary to modify the strategy of academic development in graduate study of Rajamangala University of Technology Isan throughout both inside and outside the country in terms of instruction, research, academic service for society and maintaining and supporting art and culture under limited conditions of changing so that the university can continue producing knowledgeable and intellectual persons for local society and national society,

especially those who graduate at study level would be key powers for developing people of society to higher level of academic persons. It is necessary to obtain guidelines or policy for developing appropriate academic work in order to create policy framework in producing graduates of Rajamangala University of Technology Isan with standard academic quality leading to social development both in the Northeastern Region and nationwide.

This study aimed to study the scenarios of Rajamangala University of Technology Isan in the next decade. Methods of developing in administration of Rajamangala University of Technology Isan in Thailand.

Theoretical conceptual framework: The researcher studied applicable concepts and theories and used them as a research conceptual framework. The framework was made up for 3 parts: part 1 was the four aspects of University tasks including learning and teaching management, research, academic services, art and cultural maintenance. Part 2 was the concepts involved planning, organizing, leading, controlling. Part 3 was the concepts involved in the development of the scenarios of Rajamangala University of Technology Isan by Postmodernism theory, system theory and Amartya Sen theory.

MATERIALS AND METHODS

Research design: This study administered Ethnographic Delphi Future Research (EDFR) developed by Poonpattarachewin (2005).

The population and sample: For quantitative data collection, the population from whom the researcher selected using the purposive sampling techniques were 21 administrators from Rajamangala University of Technology Isan (1 president, 3 vice president, 4 dean and 13 executive administrators, 50 instructors) and the study was divided into three rounds; the first round involved in-depth, naturalistic, structural interviews as well as panel discussion. Then collected data include the 5 level rating-scale questionnaire sent to experts answering in the second round. After that quantitative data were analyzed to determine the median, mode and inter-quartiles range. Then, the results were sent to radical scenarios and consensus in the third round for experts to provide reasonable support and consensus.

Data analysis: The collected data were analyzed using a computer program. The statistics used were percentage, median of 3.5 or higher, an inter-quartiles range of 1.50 lower and the difference between mode and median of no

>1.0. The data from an interview were analyzed and grouped according to the contents. The rating-scale in an interview were interpreted as follows:

Means necessary at the highest level	4.51-5.00
Means necessary at the high level	3.51-4.50
Means necessary at the medium level	2.51-3.50
Means necessary at the low level	1.51-2.50
Means necessary at the lowest level	1.00-1.50

RESULTS

The scenarios of Rajamangala University of Technology Isan in the next decade in terms of learning and teaching management aspect would be a growing number of graduate study curriculum and science and technology curriculum, it was the instruction for lifelong education. The findings in terms of research aspect that lecturers are expected to self-develop by creating their research and innovations for the fundamental development. With academic service aspect, it is hoped that there would be direction and planning of systematic service for society and cooperation with government and non-government organization. Art and cultural maintenance aspect would be proactive policy and planning. The university should open to every sectors, participating to define university's developing strategies, throughout graduate students production and development.

DISCUSSION

Rajamangala University of Technology Isan has administered under the Rajamangala University Act BE 2548, higher education strategies, regional developing straties. The University uses the principle of bureaucratic system in management and administration, as well as good governance. Each campus in Rajamangala University of Technology Isan tries to seek the university identity for strength and develops curriculum considering the labor's marketing and community's needs. There are geographical and ethnological indicators, which are based and developed to be consistent to the higher education for community development. These reasons would lead Rajamangala University of Technology Isan, in the Northeastern Thailand, to urgently develop many curriculums, reflecting the need of localities.

Learning and teaching management aspect: There would be a growing number of graduate study curriculum and science and technology curriculum. for learning and teaching management, the university aims to create the

instruction for lifelong education. Rajamangala University of Technology Isan aims to attain competencies, which may be briefly presented as follows: excellence in teaching and learning in line with local culture and wisdom for sustainable future, develop in academic for every 1-5 years. Teaching forms an integral component that must support the standard quality and equal opportunity is the right of all citizens. Most teachers have a chance to develop their study in Doctorate level and earn academic positions.

Research aspect: It is expected that lecturers must be self-developed by creating their research and innovations for fundament development. Applied research for the country's self-sufficiency and sustainable development and research must be integrated to cooperate with other Universities. Rajamangala University of Technology Isan will support all researcher. There would be a clear direction and a systematic plan for service for societal to cooperate with governmental and non-governmental organization.

Academic service aspect: There would be a clear direction and systematic plan social service to cooperate with governmental and non-governmental organization. Rajamangala University of Technology Isan teaches and practices skills in industrial, agriculture and zoology for the community.

Art and cultural maintenance aspect: There would be proactive policy and planning. The university should open for every sectors to participate and define university's developing strategies, throughout graduate students' production and development. Rajamangala University of Technology Isan has five campuses, which have identity in art and cultural maintenance and conserve community's culture and tradition. All campuses have many projects to participate in community.

The results showed that the experts have high agreement with the expectation of educational result processing, medium agreement with the factor and condition for educational management and low agreement with the expectation of educational management. The experts have a consensus in the results and optimistic scenarios.

CONCLUSION

Scenarios of Rajamangala University of Technology Isan in the next decade will include the development for its goals to attain the competencies in 4 keys areas, which may be briefly presented as follows:

- Excellence in teaching and learning and the development of staff to attain higher qualification in Master and Doctoral degree
- Equity opportunity and accessibility to higher education is the right of all people. The system will be fair and support lifelong learning i.e., they can study all the time
- Efficiency in the ability to respond to the country's needs and produce enough engineers
- Internationalization; Rajamangala University of Technology Isan has created the relationship with other academic institutions, especially those of their neighbouring countries, namely, Laos, Cambodia, Vietnam of which students have been studying at Rajamangala University of Technology Isan for many years

RECOMMENDATIONS

The recommendations for future study can be presented as follows:

- The scenarios of Rajamangala University of Technology Isan as a Science and Technology University should be investigated
- The scenarios in strategic development for educational management in graduate study level and the research collaboration of university groups might be conducted, for example, the cooperation of Rajamangala University of Technology Isan and other regions: Central region, Southern region and/or Northern region
- The research and development for finding model of educational management in graduate level of Rajamangala University and investigation of appropriate model for Rajamangala University with different contexts should be conducted

- Other models for developing lifelong education or equal opportunity in learning at Rajamangala University of Technology Isan should be constructed
- The models of the future government-control university, the methods of evaluation of each aspect, or the scenarios of other universities to be compared with Rajamangala University of Technology Isan should be constructed

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