

Unit 1

Introduction

Background and Significance of the Research Problems

The significance of the research on the best practices and achievement factors of NIT's personnel management presents in two parts.

Part 1 Significance of the research consists of 1) source 2) significant problems 3) reputation, education system, and teacher recruitment system of NIT.

Part 2 Crucial details of the report consist of 1) research objectives 2) research questions 3) scope of the research 4) definition 5) benefits 6) research results into practice 7) limitations of research and 8) research framework

Part 1 Significance of the research

Significance of the research explained 1) source 2) significant problems 3) reputation, education system, and teacher recruitment system of NIT as follows.

1. Source

National Education Plan 2017-2036 (Office of the Education Council, 2017) stipulated education development strategy relating to the six major strategies of the 20-year national strategy. It has been aimed to produce and develop manpower. It has been to create a competitive edge by promoting and supporting the institutes with specific teaching and learning system. These institutes have produced highly specialized graduates in the field corresponding to the needs of the country development as shown in the following Strategy 2.

Strategy 2 aims to produce and develop a manpower that meets the needs of the job market and the economic and social development of the country, promotes the utilization of research and innovation for added value and productivity. It also increases the productivity of the country's labor force by defining the direction, production and development goals. Manpower is evident in various disciplines: national qualification framework and career / professional standards; the teaching and learning skilled workforce; the training and practical internships in a real-world situation; skill development for high level of target industry in the country;

promote learning at the knowledge integration; science, technology, engineering (STEM Education); improve your English skills and develop qualified teachers to build a manpower to respond to the needs of the job market and the country's economic and social development, the support of global dynamics and competitiveness in the 21st century aligning with the national strategies of Thailand 4.0.

National Education Plan 2017-2036
(Office of the Education Council, 2017)

The aim of this important strategy was to enhance the improvement the quality of education and learners in Thai educational agencies to the international standards. As a result, it has influenced the integration of modern education system of foreign countries into the education system of Thailand. Thus, the main Thai educational institutes in the Office of Basic Education Commission (hereafter OBEC), the Office of the Vocational Education Commission (hereafter OVEC), and the Office of Higher Education Commission (hereafter OHEC) have adapted and adopted the new systems from overseas. The establishing of new educational institutions providing specific education system in the form of bilateral system has occurred throughout Thailand (Office of the Vocational Education Commission, 2016).

However, the institutes that adopted foreign education system into their affiliation had to change and develop their own system to conform to the new education system. This consistent change has to be done in order to effectively promote the education system. Therefore, the systems relating to this change has to be developed. The teacher's personal management system is one of them. It consists of production, recruitment, development, motivation, salary shift, remuneration, welfare or special allowances and retention and post-retirement care. The crucial aims of the system development are its consistency, appropriateness, fairness, and universality. Its results were expected to build the teachers' morale and to promote their performance efficiency.

Thai OVEC has signed a Memorandum of Understanding (MOU) with NIT to establish a new education system in its institutes. However, it was found that the formulation of policies and regulations in those institutes has not compatible with the changes and needs of NIT's education system. The report of the information exchange meeting on research and human resources management (OTEPC, 2017) with the representatives of NIT revealed the differences in educational contexts in Thailand and Japan. This makes it difficult for NIT to apply its recruitment and selection system to Thailand.

It is clear that Japan has no central agency to determine the qualifications or characteristics of those who will teach in the institutes. NIT institutes have the right to independently define the qualifications or characteristics of the person who will teach in their institutes. Consequently, this enhances the flexibility of its recruitment and selection system.

The qualification and specification in Thai educational institutes are determined by TEPC in two main criteria: the applicant must have a minimum of bachelor's degree and hold a teaching license. It also provides opportunities for the institutes to designate other appropriate specific qualification to meet the needs of the institutes.

However, TEPC may consider the revision and development of the specific criteria for recruiting which compatible with the needs of NIT's education system. This will promote the educational implementation in such system in a great way to reach the most effective goal and international standard. The key factor is to recruit a person who meets the needs of the organization. This will be a valuable and important asset to drive the organization to achieve its goals and objectives.

The firstly and very important mission for the success of any operation is the human resources management of the organization through the recruitment, selection, and placement process (Mathis & Jackson, 2000). Ineffective recruiting resulted in a poor quality of organization personnel. Eventually, this will cause the failure of an organization (Heneman & Heneman, 1994). Since each job is different, the tasks in each job are also different. Since each person has different attributes, the knowledge, ability, skills, and personality are also different. Thus, it is very important to select a person compatible with each workload. Each one is suitable for unequal jobs, so recruiting and staffing people that fit the job is the best solution for the organization to help motivate and create personnel's

morale and job satisfaction. In this way, the staff can perform their tasks efficiently and commit to their organization (Samitikrai, C., 2013).

OTEPC, the central organization responsible for the personnel management of the government teachers, realized the need to develop teacher recruiting system by defining and revising rules and regulations regarding the qualifications or attributes of teachers in the institutes providing a new educational system. This is to recruit qualified teachers with appropriate attributes consistent with the changes and needs of the new education system.

The renewed recruitment system must be modern, up to date, internationalized, and fair. It required two parts of the activity. The first part is a study to gather, synthesize, and summarize the body of knowledge or best practices on the qualification or specifications of the teachers. It will lead to a policy recommendation for administrators to set policy for developing teacher recruitment system. The second part is the implementation and revision to develop the regulations and recruitment criteria in accordant with the results of the study.

For the purpose of the research study, TEPC must collect, analyze, and synthesize the body of knowledge or best practices concerning the necessary and appropriate qualification or attributes for the teaching functions in the institutes that provide new teaching and learning system. Through this research process, the synthesized data will be summarized as the recommendation to the administrators for determining and developing teachers recruiting system policy. The results of the research studies will be used for the revision and development of regulations and criteria for recruiting teachers in institutes that provide new teaching and learning system.

For the purpose of criteria implementation and revision, TEPC must apply the research results into the development of regulations and criteria for recruiting teachers with the following procedures.

- 1) The findings on the policy recommendations will be presented to top executives who responsible for the consideration of the action in the relevant tasks. The action may be considered by the top executives for the setting, improving, or revising the policies on teacher personnel management and recruitment systems development. The revision must respond to the needs of the institutes that provide new teaching and learning system.

2) The results on the body of knowledge or best practices will be brought into consideration for the revision and development of teachers recruiting regulations and criteria. Through the participatory process, it promotes cooperation among relevant educational agencies, namely, OBEC; OVEC; and OHEC. These educational agencies are important variables in the teachers' production, recruitment, and preparation. This process helps maintain both appropriate and qualified people and teaching and learning standard of the institutes that provide new teaching and learning system.

The developed policy in order to match the needs and suitability for the new education system in the institutes will create a new culture for Thailand's teacher recruitment system. It is able to motivate quality personnel to fall into the system. Most of the top talented new generation cannot adapt to Thai culture. They like to find an organization with precise and rapid management policy that gives them the opportunity to think and express their opinions. The organization cannot find or hire the perfect person it desires if the organization cannot attract good and qualified people to join the organization or cannot evaluate who appropriate to the organization (Samitikrai, C., 2013).

Then, the results of the implementation, revision, and development of the recruiting rules and criteria must be used to determine policies related to salary, scholarship, welfare, or other special compensation. This is to create a new culture for the organization. The key achievement factors are payroll, salaries, psychological reward, challenging work, rapid promoting (position, authority, responsibility, and incomes), style of command, support for further study or study abroad, and the values of the organization (Samitikrai, C., 2013; Kulpeng, K., 2012).

In summary, the process mentioned above can attract people with high level of knowledge and ability to enter the system and increase effective motivation and morale of teachers. Besides, this can maintain high quality teachers with a great contribution to the institution in the long run. This leads to the creation and development of the country's quality driving the country development and elevates Thailand to a sustainable and developed country. This complies with the intent of the Teacher Civil Service and Educational Personnel Act of B.E. 2547 and government officials and educational personnel (Teacher Civil Service and Educational Personnel Act, 2004) and 20-year National strategy (2017-2036) (Office of the National Economic and Social Development Board, 2017).

Moreover, the results of the two sections above also respond to the key principles of OTEPC's strategic plan as follows:

1) The vision to enhance OTEPC status as a high-potential organization for personnel management of government teachers and educational personnel to promote the quality of education;

2) The mission to create a human resource management system for teachers and educational personnel in order to standardize and motivate teachers and educational personnel to perform effectively;

3) The goal to develop and standardize the system of human resources management for teachers and educational personnel in order to enhance effective performances and reward and benefits system, as well as to maintain standards and protect the moral system;

4) The OTEPC authority and duties under the Teachers and Educational Personnel Act B.E. 2547: section 19 to provide advice, counseling, policy definition, promotion, development, rules, regulations and other responsibilities for personnel administration for teachers and educational personnel.

2. Significance problems

OTEPC hold a meeting to exchange information on human resources management, research opportunity, and other related topics with representatives of NIT. NIT, with the collaboration of OVEC, currently implemented NIT or KOSEN education system in OVEC institutes that provide new teaching and learning or bilateral education in Thailand. Meeting report stated that OVEC bilateral institutes found the problems in the quality of teachers teaching in its institutions. Most teachers were unqualified. Their knowledge, ability, or experiences in education were not appropriate to its teaching and learning system. This resulted from the inappropriate recruiting rules and regulations and specification within the recruiting process.

The problems identified in the report were consistent with the information obtained from OVEC staff interviews (Officer Interviews, 2018) stating that selected teachers have faced the problems as follows:

- 1) Teachers feel that they lack quality and appropriate qualifications for the teaching and learning system. Due to the expectation of the management and parents, the teaching and learning must be of high quality and able to create high quality students;
- 2) Teacher has lots of workloads. They teach good students so they need to dedicate themselves to develop their teaching skills. But they do not have enough time to develop themselves since they are required to take care of their students 24 hours a day;
- 3) Teachers lack the motivation to develop their knowledge, their ability, and morale of the duty resulted in the decreasing of their performance capacity;
- 4) Teacher resigned or transferred to their hometown which prompted to a shortage of teachers and the recruiting rate does not meet the demand;
- 5) The teacher has no progress in their work. They spent their free times on reading more than teaching in order to pass the exam to transfer to other institutes; and
- 6) Teachers encounter problems in communicating with foreign languages.

To solve these problems, OVEC staff suggested that the relevant educational agencies should renew and develop specific teachers' personnel management rules and procedures in bilateral institutes which are different from the one in normal institutes. The new teachers' personnel management such in the recruiting system, namely, teachers' specification, qualifications, and recruitment methods must be agreeable with this specific teaching and learning system. Development of new teachers' personnel management must be defined along with the career path planning. The system of payment of salaries, bonuses, salaries or other special funds must relate to the development system. Thus, this will motivate quality teachers to remain in the institutes providing new education system.

Barber, M., & Mourshed, M. (2007) argued that education systems cannot be of quality beyond the quality of teachers. Therefore, recruiting the right people and develop them to be an efficient and qualified teacher is the most important to the top schools. Teacher quality is one of the main factors that affect the students' achievement and learning. Reports of TDRI research in 2016 (TDRI, 2016) and Thai Publica in 2014 (Thai Publica, 2014) stated that compensation factor was not a problem in attracting good people to become teachers for the salary of the teachers in Thailand has been gradually increased. However, the two reports also confirmed that the standardized teacher selection system was important to effective teaching and learning.

Sustainable quality education reform requires continuous selection of good teachers. Teacher quality is one of the factors that affect students' learning. A good teacher helps students learn faster than when they learned from bad teachers.

(TDRI, 2559)

3. Reputation, education system, and teacher recruitment system of NIT (KOSEN)

Professor Dr. Isao Taniguchi speech including the results of online documents and publications revealed data on NIT in three main areas: 1) NIT's reputation; 2) NIT's educational system; and 3) NIT's lecturers' recruiting system as follow.

3.1 NIT's reputation

National Institute of Technology (NIT) is one of the most important and famous institutes of Japan according to the report of the Organization for Economic Co-operation and Development (OECD). It also revealed the best practice of its educational system in human resource management, especially the standards and qualifications of those who will be teaching both in its institute in Japan and in a bilateral institute outside Japan supported by NIT (Newby, H., Weko, T., Breneman, D., Johanneson, T., & Maassen, P., 2009).

NIT explicit success

- 1) NIT has been sponsored and cooperated with leading Japanese industry companies to train the NIT learners;
- 2) NIT graduates have been offered a position by the company. One graduate has been offered positions from more than 20 top companies;
- 3) NIT graduates have worked in leading Japanese companies;
- 4) NIT graduates were able to pass the examination for further study in the top-class universities in Japan;

The identity of NIT

- 1) NIT is a higher education institute;
- 2) NIT regular course is a five-year course for students aged 15 and advanced course where higher education in engineering is conducted for two years.
- 3) NIT focuses on students' science experiments, practice training involvement, and skill and performance training in industries. In addition, NIT graduates from

KOSEN are also helping to improve their social health and well-being, they think of others and society before thinking about themselves.

4) All NIT campuses provide dormitories both inside and outside the campus.

NIT personnel context

- 1) Total 51 campuses located throughout Japan
- 2) About 50,000 students are studying in the institutes: 500 foreign students including 13 Thai students
- 3) Approximately 4,000 teachers from both domestic and international faculties and 90 percent completed Ph.D.

NIT professors' qualification

- 1) NIT lecturers have the same skills as university lecturers since 90 percent of the lecturers have obtained doctorate degree.
- 2) NIT lecturers, from both inside and outside the country, teach in a vigorous and powerful *manner*
- 3) NIT teachers participate in research activities as same as university researchers

The outstanding features of NIT

- 1) Overall key skills of students
 - 1.1) Teamwork skills include:
 1. Teamwork
 2. Independence/ability to perform actions
 - 1.2) Problem-solving skills
 1. Problem-solving skills/Logical thinking
 2. Ethics/Social responsibility & action
 - 1.3) Communication skills
- 2) Specific skills for engineering students
 - 2.1) Application skills
 - 2.2) Communication skills
 - 2.3) Consensus building
 - 2.4) Skills to gather, utilize, and address information

- 2.5) Discovering challenges
- 2.6) Logical thinking skills
- 3) Attitudes, orientation, and personal qualification
 - 3.1) Independence
 - 3.2) Self-management skills
 - 3.3) Ability to take responsibilities
 - 3.4) Teamwork skills
 - 3.5) Leadership
 - 3.6) Ethics: respect to originality and public morality
 - 3.7) Future-oriented mind and career building skills
- 4) Comprehensive learning experience and creative cogitations
 - 4.1) Creative competencies
 - 4.2) Engineering design skills

Graduates from NIT are widely known as practical engineers and researchers with creative minds. They are very popular among Japanese industry companies for being the key agents driving Japanese industrial development. Thus, this feature supported Japan to be a leading industrialized country in the world.

Therefore, it is very challenging for Thailand to be able to create and develop the country manpower. We should figure out how to nurture our students to become an engineer, a practitioner, and an innovative researcher with the same qualifications as those who have graduated from NIT. They will be able to drive continuous development of Thailand's industrial sector in a sustainable industrial development process and lead Thailand to become a developed country.

3.2 NIT's educational system

NIT or KOSEN is a higher education institute. KOSEN is a Japanese acronym for Koutou Senmon Gakkou (translated into English as the Superior Professional School or High School of Vocational Education). It is translated into English as the National Institute of Technology.

Japan's KOSEN education system is a system that accepts only students with good mathematics and science abilities as well as strong aspirations of becoming engineers and researchers. KOSEN has a very selective and competitive entrance process and

low acceptance rate. Only 1% junior high school graduate students in Japan was offered admission almost every year.

With basic math and science talents, KOSEN students will gain experience in the industry as well as deepening theoretical knowledge from classes. The graduates of KOSEN are qualified engineers, practitioners, and researchers who are the most important people in Japanese industrial development.

KOSEN courses are divided into 2 phases.

- 1) The first one is a 5-year regular course for 15 years old students
- 2) The second one is a 2-year extended advanced course

Both courses provide classroom training focusing on science experiments. In addition to those classrooms experiments and coursework, the practical action and skills training in cooperation with the industrial facilitators in the workplace was also provided. This will allow these engineering students to be creative and skillful under the challenging spirits. Each of which consists of two parts:

Part 1: Knowledge content that focuses on theoretical study in comparative with research work which is equivalent to university level study;

Part 2: Engineering skills that demonstrate the ability to collect and analyze data which is higher than university level study.

3.3 NIT's lecturers' recruiting system

Lecturers' recruitment system is based on the consensus of all parties and also flexible throughout the system. The testing and selecting criteria are differently defined according to each institutes' specific needs. Therefore, it is said that each NIT institute can set its own standards of lecturers' qualifications or characteristics and independently select their lecturers.

Criteria for qualifications of those who teach in NIT institutions are summarized as follows.

1) A doctorate degree in engineering or mathematics or equivalent
(This qualification is very flexible.)

2) A bachelor or master degree with an excellent educational background or high level of work experience and skills in the workplace or company or in university

3) Skilled workers in the workplace or company and university lecturers are also eligible for a part-time teaching vacancy

4) Researchers with academic paper or research paper published in peer-reviewed international journals or made a presentation at international conferences (a very important criterion) or

5) Have specific qualifications in the fields each institute needed

6) Strong Japanese communication skill

In summary, this research has been studied in three main themes as follow.

1. Principles and concepts

Barber, M., & Mourshed, M. (2007) indicated that the quality of educational system cannot exceed the quality of teachers. TDRI (2016) report also stated that the reform of sustainable education quality requires the selection of good teachers continuously. The quality of the teacher is one of the factors that affect the learner's learning; therefore, it is necessary to conduct the research to figure out how to effectively recruit the appropriate and quality teachers. The selection of qualified human resources for the job of teaching is essential.

2. Problems

From the study of documents, report of the keynote speech at the meeting, report of the meeting to exchange information, and the interview of related staff revealed that the bilateral educational institutions adapting new education system in Thailand lack of qualified teachers who meet the needs of education management. This is due to the current inappropriate policy, rules, regulation, and criteria.

3. Framework of Problems Solving

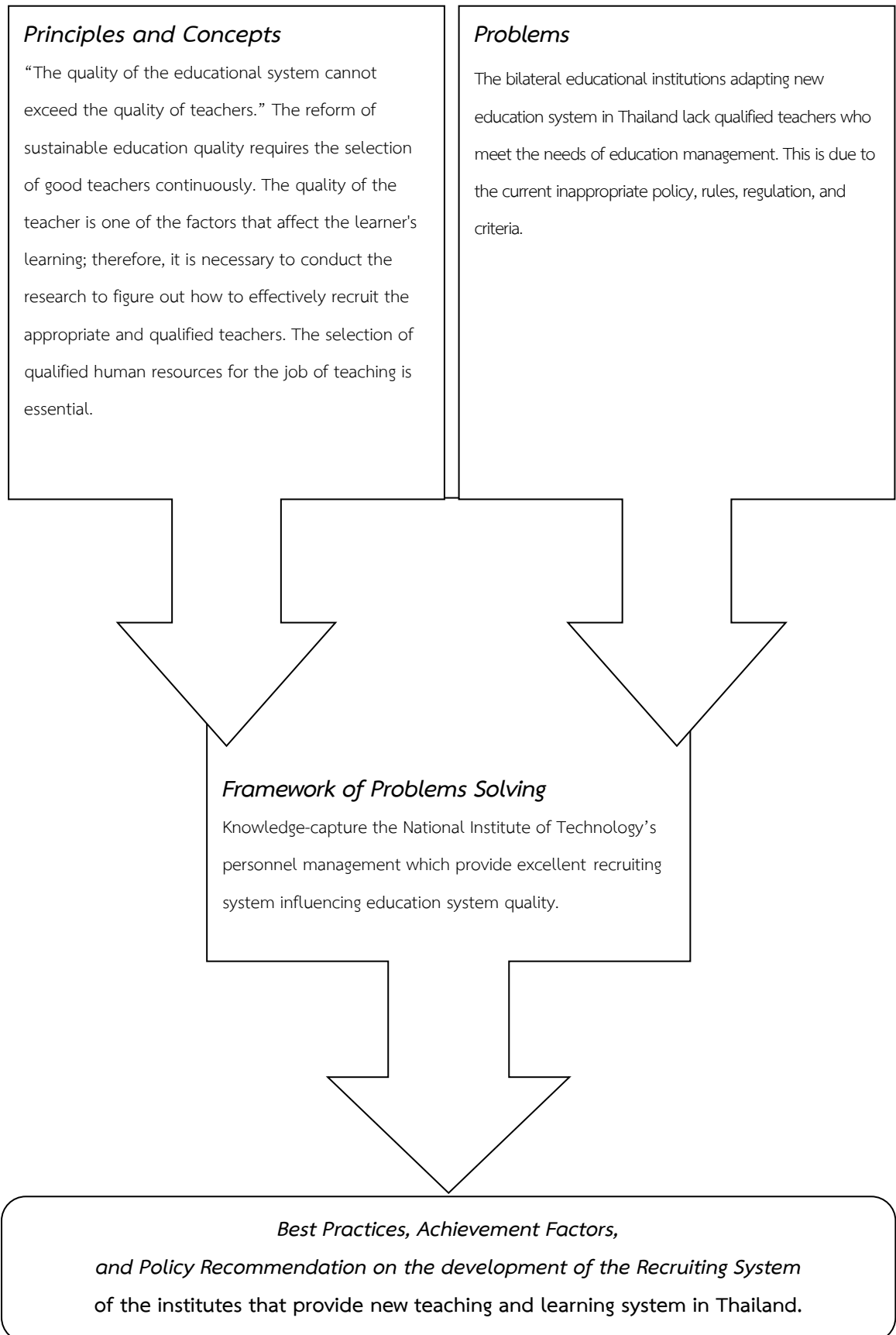
It is in regard to the qualification of those who will serve as the teacher in the institutions with excellent educational management like NIT.

Therefore, the two main objectives of this study are as follows:

1) To study the best practices and achievement factors on NIT's recruiting system

2) To establish the policy recommendation in the development of the recruiting system for Thai institutes that provides new teaching and learning or bilateral education as shown in the following figure.

Figure 1 *Conceptual framework*



Researchers believe that the results of the study were very useful to educational agencies for the setting and developing of policy, rules, regulations, and criteria on appropriate teachers' qualifications and selection regarding the needs of the education system. This was to promote the efficiency of education management and quality development of teachers and learners. Research results would be published for those who were interested to apply to their context.

Part 2 Crucial details of the report

Crucial details of the report consist of 1) research objectives 2) research questions 3) scope of research 4) definition 5) benefits and 6) limitations of research.

Research objectives

1. To illustrate the best practices and achievement factors of NIT's recruitment system
2. To establish the policy recommendation for the development of the recruiting system of Thai institutes that provides new teaching and learning or bilateral education

Research questions

1. What are the best practices and achievement factors of NIT's recruitment system?
2. What are the policy recommendation for the development of the recruiting system of Thai institutes that provides new teaching and learning or bilateral education?

Scope of research

This study was to capture the knowledge of the best practices and achievement factors in NIT's recruitment. It was conducted in the fiscal year 2018 and the scope of research was in the following areas.

1. Scope of resources
 - 1.1 Scope in documentary resources

Researchers have defined the documentary as research papers, laws, texts, dissertations, and other publications from Thailand and other countries relating to the following topics.

- 1) Importance of recruitment system
- 2) Teachers' recruitment system in Thailand
- 3) Teachers' recruitment system and lecturers' tasks in Japan
- 4) General context of Japan
- 5) General context of National Institute of Technology, Japan (NIT)

1.2 Scope in the area of study

The study results from both domestic and international document sources, exchanged information between educational agencies, report summary of top executives of NIT speech confirmed the reputation of NIT educational system and its personnel management system. NIT or KOSEN also operated the best practice of its academic staff recruiting system for NIT. This matches the interests of the research team regarding the best practices in the recruitment system, especially the qualification of teachers in order to improve those systems in Thai institutes. Then, the results of the study are used as the basis for the development of teacher recruitment system in such institutes. Due to this reason, NIT was chosen as the major source of information in this area of the study.

2. Scope of the informants

The key informants in the study were the key personnel in NIT, namely, executives, middle-rank management staff, administration staff, and academic staff as well as the executives in NIT headquarters. In this study, the data were collected from the documentary, in-depth interview, and focus group discussion in 2 NIT major colleges in Japan: Kumamoto College in Kumamoto City and Ube College in Ube Town.

3. Scope of study contents

The research study contents were as follows:

3.1 The best practices in NIT's recruiting system, lecturers' specification, and other systems influencing the achievement of its recruiting system

3.2 The external and internal achievement factors influencing NIT's recruiting system

4. Scope of study period

The duration of the study is the fiscal year 2018.

5. Scope in related dimensions

5.1 Economical dimension

Since 1946, major changes in Japan's economy caused by the force of the country recovering after World War II era. It was a time when Japan entered the economic transition. Japan was able to expand its educational opportunities to the local population, thus making the growth of education more visible.

This was the important turning point of modern education in Japan. The emphasis was on the introduction of high technology from the West to create a wealthy and strong civilization for the country by promoting industrial development and increasing productivity plus investment initiatives. The education is focused on producing a high potential new generation to be able to create and work together with advanced technology. The technology has been developed to support the growth of a modernized industry the country needs.

Japan awareness of reform was focused on its educational management system. The government has turned its attention to educational institutions that conduct new education system: the emphasis on learning theories within the school and the practical learning in the workplace simultaneously. As such, it resulted in the rapid expansion of the Japanese National Institute of Technology (NIT) throughout Japan (Khlanguwan, Y., 2003).

Japan's need for economic recovery after World War II caused the Japanese government to accelerate the development of education responding to the world in the 21st century. Its economic benefits were the most important pace upgrading Japan to become one of the most powerful economic countries (Inganant, P., 1980). It is an important part to cultivate its ability to develop the country in a way that is comparable to civilization countries. Therefore, there must be a study on the impact of the Japanese economy on the new educational management system especially the recruitment process.

5.2 Social and cultural dimension

Japanese society is unique in terms of being a society of unity and a social order. It is influenced by cultures and traditions inherited from the past (Khlanguwan, Y. 2003). In addition, Japanese society is a strong society and most people value success, courage, expression, challenge, and reward for concrete success. So, the Japanese society focuses on the competition, long-term success, and future-oriented (Hofstede, 1981; Hofstede, 1991).

Japanese culture is influenced by a national culture which can be seen from the organization management in Japan: the management style of the father and son (Paternalism). It is a distinctive feature of Japanese organization management that reflects traditional culture and values of "Group reliance and unity" (Tsutsui, 1997).

Not only the education system but the organization system in Japan are also influenced by culture and traditional values and were recognized as a system promoting collaborative learning, unity, and social order (Khlanguwan, Y. 2003), Japan policy focused on its development for prosperous economy after World War II. It was aimed at recruiting satisfied talented people to work in the organization and study or work in educational institutions.

Thus, education policy of Japan society focused on the study for the benefit of the public and the nation not a study for the benefit of an individual. It indoctrinated Japanese people to always consider putting the national needs in the first place - before thinking of their own personal needs (Wray, H. 1999).

It is concluded that Japanese society and culture have a great influence on the lives and beliefs of the people in Japanese society. It was used as a basis for the personal characteristics and working performances of the people in Japan society which also influence the determination of recruiting and selecting process in its management system. Therefore, Japanese' social and cultural dimensions are two important components for the analysis and synthesis of the data and the discussion of research results.

Definition

Institute means the schools or colleges that provides new teaching and learning or bilateral education system

Recruiting system means the principal concepts, recruiting process, channel of recruitment, recruiting method, lecturers' specification, and other systems influencing the achievement of the recruiting system

Achievement factor means the internal and external positive environment influencing the success of NIT's recruiting system

Benefits

The benefits of the study in 3 aspects were as follows.

1. Benefit for the central organization

The benefit for the Office of the Teacher Civil Service and Educational Personnel Commission (OTEPC) divided into two areas as follows.

1.1 Benefit for research study consisted of 2 parts as follows:

1) The knowledge of critical contexts and best practices in the teacher recruitment process of NIT which can be used as a database to compare and analyze the possibility of applying, improving, developing, and integrating with Thai teacher recruitment process;

2) The guidelines for synthesizing recommendations regarding policy determination, development, and improvement on teacher recruitment process in the institutes that provide new teaching and learning or specialized education system toward the international standards, fairness, and effective personnel performance motivation.

1.2 Benefit for development was the guidelines for the development of policy, rules, regulations, and criteria on the recruitment process including the recruiting and selecting, specification, and teacher standards. The development must be conducted on the basis of fair, appropriate, and universal standards to serve the needs of the institutes that provide new teaching and learning or specialized education system. This is to motivate high-quality lecturers to enter the system and have the morale to work effectively.

2. Benefit for national education

OTEPC concrete action on the operation mentioned in 1.1 and 1.2 will result in the development of the country's quality. It can drive the national development and sustainably elevate Thailand as a developed country regarding the intent of the 20- year national strategic plan.

3. Other benefits

1) Benefit on academic contribution

OTEPC, educational sectors, government teachers, government administration officers, and interested parties are able to use the results of the study as a referenced database for their production of research articles or other academic works.

2) Benefits on governmental contribution

Government, Ministry of Education, and the superior unit of OBEC, OVEC, and OHEC with responsibility for human resource management are able to implicate the results of the study as a referenced database for human resource management policy and strategies formulation and development.

3) Benefits on society and community

The results of the publication of research articles or other academic works in 1 and human resource management policy and strategies formulation and development in 2, accordingly, will benefit the quality development of schools, government officials, teachers, learners, parents, and communities.

Limitations of research

The research design was a knowledge capturing so the in-depth data collected from the interviews and group discussions with key informants in real research area were needed. To conduct the in-depth data collection as needed, therefore, the oversea field trip was made. Since the research team had to collect data oversea which was Japan, the data collection was necessarily conducted in limited time and sampling areas. The evaluation of KOSEN should be made by graduates of KOSEN. Therefore, to collect information from the companies that accepted the graduates was also recommended for the next time.

However, the research team has cooperated to coordinate the collection of data from NIT. Two qualified sampling areas: Kumamoto College in Kumamoto City and Ube College in Ube town including the headquarters in Tokyo, were chosen as the representatives of the National Institute of Technology of Japan.