



Needs Assessment for Developing the Driving System of Work-integrated Education Management of Rajabhat Universities in the Upper Northern Region

Jiraporn Supising*

Sirimas Kosanpipat**

Phubet Pongkaew**

Choocheep Puthaprasert***

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ABSTRACT

The objective of the research was to study needs assessment for developing the driving system of work-integrated education management in Rajabhat universities in the upper northern region. The study was divided into 3 phases as follows: 1) to investigate the current conditions for developing the driving system of work-integrated education management of Rajabhat universities in the upper northern region; 2) to examine the desired conditions for developing the driving system of work-integrated education management of Rajabhat universities in the upper northern region; and 3) to inquire into the needs assessment for developing the driving system of work-integrated education management of Rajabhat universities in the upper northern region. Key informants consisted of representatives of faculty lecturers from four Rajabhat universities in the upper northern region, namely Chiang Mai Rajabhat University, Chiang Rai Rajabhat University, Lampang Rajabhat University, and Uttaradit Rajabhat University who were involved with the cooperative and work-integrated education program selected by purposive sampling, for a total of eight respondents.

*Ed.D. Candidate (Educational Administration), Graduate School, Chiang Mai Rajabhat University

*Assistant Professor, Educational Administration Program, Graduate School, Western University

**Lecturer, Educational Administration Program, Graduate School, Chiang Mai Rajabhat University

***Associate Professor, Chairman of Doctor of Education (Educational Administration), Graduate School, Chiang Mai Rajabhat University

The instrument used for data collection was an in-depth interview form. The data were analyzed by content analysis and summarizing into issues. The results of the needs assessment in terms of the current conditions and the desired conditions led to the development of the driving system of work-integrated education management, consisting of policy, curriculum, policy implementation, students, and workplaces and employers.

**Keywords : Needs Assessment / Driving System / Work-integrated Education /
Rajabhat Universities**

Statement of the Problem

Due to the announcement of Thailand's 20-year National Strategy (2018–2037) (Royal Thai Government Gazette, 2018, pp. 34-35) on developing and strengthening human capital, which stated that adapted learning systems to enhance necessary skill development by systematically creating learning processes for every educational level, from pre-school to higher education, with a focus on improving learners' ability to properly manage their learning; encouraging learners' learning skills and creativity for more applications in the workplace and in daily life.

In line with the determination of the Twelfth National Economic and Social Development Plan (2017-2021) (Office of the National Economic and Social Development Board (NESDB), 2016, p. 53), the quality of Thailand's education system remains a key concern, with poor levels of learning accomplishment among Thais. Many higher education institutions extended enrollment in fields and areas without determining labor market need, resulting in many graduates with skills and knowledge that fell short of market expectations.

According to the manual for Internal Quality Assurance for Higher Education, all programs should provide students with a chance to learn from individuals, organizations, or communities outside the universities who have experience in the field of professional study area. As a result, students know how to apply theoretical knowledge to contexts in practice and have modernized professional knowledge. Students may pay attention in class, visit a place outside or workplaces, or take part in cooperative education as a trainee in a business. The positive essential educational effect of cooperative and work-integrated education (CWIE) in Thailand and ASEAN should be underlined for students, colleges, and companies. The positive consequences could be summarized as a WIN-WIN-WIN situation. (Srisa-an, 2014, p.8)

For working in the real world, the World Association for Cooperative and Work-Integrated Education (WACE) (2020) defined Cooperative and Work-Integrated Education (CWIE) as a term of "experiential learning" by WACE to encompass industry and educational institutions that use a variety of experiential learning methods to develop the world's next generation of professionals. Cooperative education, training program, semesters in the workplace, exchange of international co-op, overseas studies, research, rotations in the clinic, learning through service, and service to the community were all included under the umbrella title of CWIE.

According to needs assessment that was introduced by Watkins, Métiers, and Visser (2012), it could assist in the improvement of quality decisions, leading to better performance and the accomplishment of desired results. In addition, Cuiccio (2018, p.1) defined first and foremost, needs assessment as a technique that can assist educators at all levels in successfully identifying, understanding, and better addressing educational difficulties. It is a detailed investigation of the disparity between an organization's existing state and its desired state, as well as the factors that contribute to that gap.

In recent years, work-integrated education has become increasingly popular in higher education. In higher education, a cooperative education system has been revised. The program's goals were to improve students' work skills through hands-on experience, reduce unemployment, and modernize curricula. Moreover, work-integrated education programs emphasize incorporating students' work experiences into their educational curricula and have been advancing and developing with noticeable quality. The researcher realizes the necessity to conduct work-integrated education management of Rajabhat universities in the upper northern region in order to cooperate in the same direction according to the Higher Education, Science, Research, and Innovation Policy and Strategy (2020-2027).

Objectives

The study needs assessment for developing the driving system of work-integrated education management in Rajabhat universities in the upper northern region was divided into 3 phases as follows:

1. To investigate the current conditions for developing the driving system of work-integrated education management of Rajabhat universities in the upper northern region.

2. To examine the desired conditions for developing the driving system of work-integrated education management of Rajabhat universities in the upper northern region.

3. To inquire into the needs assessment for developing the driving system of work-integrated education management of Rajabhat universities in the upper northern region.

Methodology

While studying the needs assessment for developing the driving system of work-integrated education management in Rajabhat universities in the upper northern region, the researcher conducted as follows:

1. Key informants selected by purposive consisted of representatives of course lecturers who were involved with the cooperative and work-integrated education programs from four Rajabhat universities in the upper northern region, namely Chiang Mai Rajabhat University, Chiang Rai Rajabhat University, Lampang Rajabhat University, and Uttaradit Rajabhat University, for a total of eight respondents.

2. The key open-ended questions for an in-depth interview form were conducted to investigate the current conditions and examine the desired conditions, leading to an inquiry into the needs assessment for developing the driving system of work-integrated education management in terms of policy, curriculum, implementation, students, workplaces, and employers. The researcher studied the documents, concepts, theoretical papers, and related research concerning the needs assessment for developing the driving system of work-integrated education management in Rajabhat Universities in the upper northern region and applied the components from the synthesis results of the previous study (Supising, et al., 2021) to construct the key open-ended questions for an in-depth interview form. Then, the key open-ended questions for an in-depth interview form were proposed to the dissertation advisors to check and approve.

3. The researcher provided an in-depth interview form by going on an interview face-to-face, interviewing by telephone, and interviewing via Zoom meeting.

4. Content analysis was used to analyze the data, which was then summarized into issues.

Conclusions

Results of studying needs assessment for developing the driving system of work-integrated education management of Rajabhat universities in the upper northern region from the in-depth interview form, the results of the current conditions and the desired conditions leading to the needs assessment as shown in Table 1.

Table 1 Results of studying needs assessment for developing the driving system of work-integrated education management of Rajabhat Universities in the upper northern region in terms of policy, curriculum, implementation, students, workplaces, and employers.

Terms of Needs Assessment	The current conditions	The desired conditions	The needs assessment
Policy	<p>-Policy is disregarded by some administrators who disagree and are unaware of the instructional management benefits of cooperative and work-integrated education programs.</p> <p>-Some administrators are frequently changed, the policy is changed, and responsible personnel are also often changed, affecting their ability to work periodically.</p>	<p>-Policy management must be pushed aside in favor of more "urgent" priorities.</p> <p>-The university policy must be to not only offer a degree but also prepare itself for the big world of employment awaiting students after graduation.</p> <p>-For supporting policies, the government must allocate educational funds for students and technology development to educational institutions, specific workplaces, establishments, training centers, research institutes, or national government agencies in all fields of work, as approved by</p>	<p>-Senior administrators should play an important role in implementing the policy in all sectors.</p> <p>-All levels of educational institutions should follow the policy and strategy of Thailand's HES (2563-2570) and Thailand's SRI plan (2563-2565) to drive a system for cooperative development among higher education institutions.</p> <p>-The cooperative and work-integrated education programs should be implemented in accordance with the management component indicators showing in curriculum</p>

Table 1 (continued)

Terms of Needs Assessment	The current conditions	The desired conditions	The needs assessment
Curriculum	<p>-Even though the cooperative and work-integrated education curriculums are popular in educational institutions, some administrators do not realize the benefits of students.</p> <p>-Although policy requires cooperative and work-integrated education curricula to be included in all courses, it is only an additional course for students who wish to enroll; it is not a compulsory course.</p>	<p>cooperative education programs, work-integrated education (WIE) programs, work-integrated learning (WIL) programs, work-based programs, and training programs.</p> <p>-The cooperative and work-integrated education curriculum must be emphasized with all curriculums and all courses with corresponding field experience (if applicable) to cope with the era of disruption. Students must be exposed to activities that build self-directed learning abilities and skills through practical activities conducted both inside and outside of class or by experienced academics or</p>	<p>quality assurance at the faculty level of Rajabhat universities.</p> <p>-Reviewing and updating the curriculum and procedures should be an essential part of maintaining your faculties and ensuring operational excellence.</p> <p>-Cooperative and work-integrated education curricula should be shared on how to design an undergraduate educational program that systematically integrates classroom learning with</p>

Table 1 (continued)

Terms of Needs Assessment	The current conditions	The desired conditions	The needs assessment
	<p>-Some curricula have many courses comprising multiple disciplines. This makes it difficult to find a suitable workplace.</p>	<p>professionals from outside organizations.</p> <p>-The cooperative and work-integrated education curriculum must include learning that takes place in a work environment, through participation in work practice and process, and it is essential to career education and training.</p>	<p>real-world experience in enterprises, establishments, and businesses.</p> <p>-Cooperative and work-integrated education curricula should integrate classroom learning with on-the-job training, requiring participating enterprises to collaborate with all connected sectors.</p> <p>-The courses should help equip students with real-world work experience that responds to market demand.</p>

Table 1 (continued)

Terms of Needs Assessment	The current conditions	The desired conditions	The needs assessment
Implementation	<p>-The senior faculty lecturers are still stuck with the original internship and view that the cooperative and work-integrated education programs are difficult to manage.</p> <p>- Cooperative and work-integrated education programs have not been maintained and advanced through processes of educational quality improvement, and their effectiveness has not been proven through processes of educational quality assurance systems and mechanisms of student-centered instructional management. Therefore, it is not clear whether all faculties</p>	<p>-A significant aim of achieving a degree at a higher education institution (HEI) must be to improve one's chances of getting a job.</p> <p>-During a student's academic studies, cooperative and work-integrated education programs must have a mechanism in place to bring many stakeholders together so that these challenges can be addressed in real-time, authentic ways that assist the student learn and be ready for the professional workplace.</p> <p>-At universities, cooperative and work-integrated education programs must contain specific</p>	<p>-Implementation The Policy and Strategy of Thailand's Higher Education System (HES 2563-2570 and Thailand's SRI Plan 2563-2565) should drive a system for cooperative development among higher education institutions actively.</p> <p>-There should be close and continuous monitoring and evaluating of results throughout the program.</p> <p>-The senior faculty lecturers should adjust their attitudes to accept the changes.</p>

Table 1 (continued)

Terms of Needs Assessment	The current conditions	The desired conditions	The needs assessment
	<p>should apply for teaching and learning management:</p> <ul style="list-style-type: none"> -Only some faculties give priority to cooperative and work-integrated education programs that benefit students. 	<p>courses and activities in which learning theory is actively integrated with work practice through carefully developed curriculum, pedagogical practices, and student engagement.</p>	
Students	<ul style="list-style-type: none"> -Not all students are wholly involved with cooperative and work-integrated education programs. The resulting curriculum does not provide for all students and all faculties. -Most students misunderstand that cooperative and work-integrated education programs may be more difficult than normal training. 	<p>All universities must provide work-integrated education programs that require students to gain essential practical work experience by working in workplaces, establishments, enterprises, or companies.</p>	<p>Students should have pre and post knowledge of cooperative and work-integrated education programs, such as the participative relationships among universities, employers, mentors, and organizational environments that have an impact on students' performance.</p>

Table 1 (continued)

Terms of Needs Assessment	The current conditions	The desired conditions	The needs assessment
	-Not all students perceive that cooperative and work-integrated education programs will help students make a better change from life in a university to productive and satisfied careers.		
Workplaces and employers	<p>-There is no provision for official Memorandum of Understanding (MOU) with the workplaces, establishments, enterprises, or companies. As a result, they do not cooperate as they should.</p> <p>-The workplaces, establishments, enterprises, and companies do not receive compensation for the cooperative and work-integrated education programs from the government as in the past.</p>	<p>-The core components of cooperative and work-integrated education programs must be discussed and implemented through engagement among universities, workplaces, establishments, enterprises, companies, and employers.</p> <p>-The universities must force the Ministry of Higher Education, Science, Research, and Innovation to find an urgent budget for cooperative and</p>	<p>-A collaboration between universities and workplaces, establishments, enterprises, or businesses should aim to expand cooperative and work-integrated education programs while also strengthening employer engagement.</p> <p>-There should be an official Memorandum of Understanding (MOU) with the workplaces and give importance to the</p>

Table 1 (continued)

Terms of Needs Assessment	The current conditions	The desired conditions	The needs assessment
	-Education systems and institutions are delayed in preparing students to be competent for employment to keep up with the rapid changes in business and industry. -It is still an important issue that requires the cooperation of employers to help as mentors to provide knowledge in various fields and give students the opportunity to be trained in match with cooperative and work-integrated education programs. -Some employers do not understand the cooperative and work-integrated education programs of students in various	work-integrated education programs. -The work placements must greatly enhance career clarification for students to be trained.	workplaces, such as honoring certificates or awards. -There should be a budget from the government to support compensation in order to motivate workplaces, establishments, enterprises, and companies willing to welcome students of cooperative and work-integrated education programs. -Participative workplaces, establishments, enterprises, and companies should have a curriculum in the fields in accordance with the standards and quality assurance set by the Office of the Higher Education Commission (OHEC).

Table 1 (continued)

Terms of Needs Assessment	The current conditions	The desired conditions	The needs assessment
	courses; they think that it is like a normal training course.		

Discussion

The research results of needs assessment could be discussed as follows:

In terms of policy, needs assessment comprised of senior administrators should play the important roles in implementing the policy to all sectors; all levels of education institution should follow the policy and strategy of Thailand HES 2563-2570 and Thailand SRI plan 2563-2565 to drive system for cooperative development among higher education institutions; and the cooperative and work-integrated education program should be implemented in accordance with an indicator. In accordance with one of the objectives and key results (OKR) (Office of National Higher Education, Science, Research and Innovation Policy Council (NXPO), 2019, p. 14) was to use a quality workforce that met the country's needs in terms of a driving system for cooperative development among higher education institutions and the private sectors to produce quality graduates or new graduates with skills that match or come close to the job market demand for 1 million students in four years by 2023, and to implement the cooperative and work-integrated education program in accordance with an indicator of the management component, indicating in curriculum quality assurance at the faculty level of all Rajabhat universities. Moreover, Champatong, Secretary-General for the Higher Education Commission (2018, p. 12), the Office of Higher Education: Thailand 4.0's roles were to produce a quality workforce ready for the labor market and the next generation of Thai industry and drive knowledge transfer for industry and every sector.

As regards the curriculum, needs assessment consists of reviewing and updating the curriculum and procedures, which should be an essential part of maintaining your faculties and ensuring operational excellence; the cooperative and work-integrated education curriculum should be shared as how to organize an undergraduate education program that systematically combines classroom-based education with work experience in workplaces, establishments, and companies; the management of cooperative and work-integrated education curriculum should integrate studying with hands-on occupational experience and require participating companies to work in collaboration with all related sectors; and the courses should help equip students with real-world work experience that responds to market demand. Similarly, the Thai Qualifications Framework for Higher Education, TQF: HEEd. (Royal Thai Government Gazette, 2019, p. 21) announced the fifth standard in terms of management that higher education institutions should offer courses and learning management that focus on integrated learners' development to provide desirable characteristics meeting the national

strategy and a variety of the country's needs in terms of economies, society, and environment through the participation of communities, society, and workplaces in both public and private sectors.

In terms of implementation, needs assessment, which includes implementing Thailand HES 2563-2570 policy and strategy and Thailand SRI plan 2563-2565, should be closely and continuously monitored and evaluated results throughout the programs, and senior faculty lecturers should be adjusted to accept the changes. To the Office of National Higher Education Science Research and Innovation Policy Council (2020), the Higher Education, Science, Research, and Innovation Policy and Strategy (2020–2027) was developed by taking into account government reform as well as domestic and international current events concerning the platform of workforce and knowledge development, particularly those aimed at developing knowledge, current, and future worker skills and capacities to meet the demands of an industry that is constantly confronted with technological disruptions. Similar to SAMHSA Substance Abuse and Mental Health Administration Service (2020), the needs assessment can assist in identifying current situations as well as desired treatments or goals. It was probably about improving the existing and future workforce's knowledge, skills, and competencies to meet industry demand.

As regards the students, needs assessment consists of students' pre and post knowledge of cooperative and work-integrated education programs such as the participative relationships among universities, employers, mentors, and organizational environments that have an impact on students' performance. Correspondingly, the Higher Education Act 2019 (Royal Thai Government Gazette, 2019, p. 63) in Section 31 requires that higher education institutions form partnerships with government agencies, the private sector, and the industrial sector to support learning and teaching management in higher education institutions so that students can learn through practical work and develop knowledge, skills, competencies, and other characteristics while spending time learning in both a higher education institution and a workplace. Furthermore, in terms of quality assurance, the Australian Government, Department of Education, Skills and Employment (2020, p. 8) supported that the Thai Qualifications Framework (TQF) for higher education provided appropriate points of comparison in academic standards for all HEIs in their planning and internal quality assurance processes, for external assessors, and for employers in determining the skills and competencies of graduates they might employ.

As regards the workplaces and employers, needs assessment should be aimed at strengthening more engagement with employers; there should be the provision of official Memorandum of Understanding (MOU) with the workplaces and give importance to the workplaces such as honoring certificates or awards; there should be a budget from the government to support compensation in order to motivate workplaces/establishments/enterprises/companies willing to welcome students of the cooperative and work-integrated education program; and participative workplaces/establishments/enterprises/companies should have a curriculum in the fields in accordance with the standards and quality assurance set by the Office of the Higher Education Commission (OHEC). In accordance with the Higher Education Act 2019 (Royal Thai Government Gazette, 2019, p. 64), Section 35 stipulates that higher education institutions should establish cooperation with agencies both in the public and private sectors, including the industrial sectors, to support the teaching and learning management of higher education institutions in order for learners to learn by doing work. Likewise, Thailand's 20-Year National Strategy (2018–2037) (Royal Thai Government Gazette, 2018, p. 9) announced that the developments following this strategy would assist in the promotion of modern innovators, thinkers, employers, farmers, and so on, based on personal skills and abilities.

It can be summarized that needs assessment for developing the driving system of work-integrated education management at universities can take several forms, ranging from minimum interaction and arrangements to complete integration into a degree that is both examined and certified. At universities, most work-integrated education occurs at undergraduate degree levels, but it can also happen at the postgraduate level. Work-integrated education requires involvement from universities and workplaces/establishments/enterprises/companies, and both sectors face challenges engaging with employers. Furthermore, the study of needs assessments will help to make good decisions, moving from current to the desired implementation accurately to benefit the organization.

Suggestions

Recommendations for Application of Research Findings

1. Government policy should be implemented as a mandated program.
2. The cooperation of employers is significantly required to be able to participate in cooperative and work-integrated education programs.

Recommendations for Further Research

1. There should be development guidelines for the drive system of work-integrated education management of Rajabhat universities in the upper northern region.
2. There should be a management manual for developing the driving system of work-integrated education management for Rajabhat universities in the upper northern region.

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