The management of cooperative and work-integrated education for academic institutions of higher education in Thailand

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**Abstract**

The purpose of this article is to explain the process and benefits of, as well as the obstacles and keys to, the success of education management in the Cooperative and Work-Integrated Education Program (CWIE) in Thailand’s higher education system. This study employs secondary data, which we analyze using content and descriptive analysis. Data analysis showed that cooperative education courses are taught in a coproduced manner between higher education institutions and business establishments (public, private, and community) so that graduates are ready to enter the real world of work immediately, develop competencies that match the needs of the labor market, and prepare for future job positions. In addition, cooperative education encourages students to gain professional, self-development, and academic skills from the knowledge they receive. Cooperative education is an activity or operational process that includes an effective planning process and cooperation from all parties, including the business establishment, as well as quality cooperative education, including educational standards, curriculum teaching, supervision standards, student's standards, and measurement and evaluation standards. However, problems arise in cooperative education; for example, students should receive job training, and advisors do not receive much support. For the development of cooperative education, academic institutions should create a digital platform specifically for the management of cooperative education.

**Keywords:** Academic institute, Cooperative education, Management, Higher education, University level, Work integrated.
In many countries, it is currently demanded to engage with more community stakeholders: the student, the academic institution, and external stakeholders, such as business organizations, industries, and prepare graduates for work right after graduation. In addition, from 1993 to 2022, Thailand had nearly 20,000 business organizations participating in CWIE partnerships, and more than 75,000 CWIE student participants found work after graduation (Ministry of Higher Education Science, 2022). After a few decades, CWIE in Thailand

## 1. Introduction

Cooperative education is a form of teaching and learning that emphasizes experiential learning and practical work in students’ workplaces. This concept has a variety of names, such as experiential education, work-study program, work-based education, sandwich program, and internship. However, in many countries, it is currently referred to as “cooperative education” and/or “work-integrated learning” (WIL) (Luekitinan, Nontasak, & Saosaweang, 2015). Cooperative education is a teaching and learning management system that focuses on allowing students to work in the workplace and apply knowledge from educational institutions (Kerdhan, Jantra, & Ekwarangkoon, 2021). It involves students working and learning on the job full time for 16 weeks before graduation. Students often take staff or temporary positions (Pinchunsri, 2015). Cooperative learning encourages learning, fosters respect and friendships among diverse groups of students and other people at work, and encourages students to share their experience, solve problems, and accept feedback (Attle & Baker, 2007; Hänze & Berger, 2007). In addition, cooperative education in many countries is considered WIL. The aim of WIL is to give students work experience by allowing them to learn by doing in the workplace (Hägg & Kurczewska, 2021). WIL is based on three stakeholders: the student, the academic institution, and external stakeholders, such as business organizations, entrepreneurs, and manufacturers (Smith & Worsfold, 2015).

Cooperative education requires experience from real and relevant work in the participant’s field of study and gives students the opportunity to gain experience in their field of study (Jones, 2007). WIL is typically offered in degree-level programs that combine classroom-based instruction with one or more periods of relevant experiential learning in authentic work settings. A cooperative education or WIL program is viewed as almost anything with some form of experiential learning or a workplace-based, off-campus component (Zegwaard & Coll, 2011). Teaching and learning in the form of cooperative education can be used as an alternative method of education management and is widely accepted internationally. Some educational institutions in Thailand include it in the learning process to develop graduates as qualified graduates per professional academic standards and to meet graduates’ and the labor market’s needs (Kerdhan et al., 2021).

As mentioned above, many higher education institutions around the world use cooperative education to provide a broader range of degree studies in almost every field of study, with the same objective: promote graduate quality according to academic and professional standards and meet the labor market’s needs. As a part of graduate preparation, students are ready to choose a career and enter the labor market immediately after graduation. In addition, cooperative education, WIL, and the Cooperative and Work-Integrated Education Program (CWIE) are similar in that they combine classroom learning with on-the-job training. The purpose of this article is to explain the process and benefits of, as well as the obstacles and keys to, the success of CWIE management in Thailand’s higher education system.

## 2. Cooperative Education in Thailand

Cooperative education in Thailand was established in 1995 at Suanr teen University of Technology. This program was called CWIE and was intended to develop and improve the quality of its graduates, respond to the new market demand, engage with more communities and industries, and prepare graduates for work right after graduation. In addition, in CWIE, the students must work full time for at least 4 months at a workplace with academic supervision and assessment, earning no less than six credits (Srisa-an, 2018). In addition, from 1993 to 2022, Thailand had nearly 20,000 business organizations participating in CWIE partnerships, and more than 75,000 CWIE student participants found work after graduation (Ministry of Higher Education Science, 2022). After a few decades, CWIE in Thailand...
still faced weakness in the understanding of cooperative education among educational staff as well as organizations' reluctance to accept internships. Some organizations do not pay students or provide them with necessary welfare. There is a lack of association between policy and practice among higher education institutions, government agencies, and organizations that accept students for internships, and business organizations are not concerned with the benefits of cooperative education. They perceive an increased burden connected to cooperative education with the many procedures and difficulties in management (Napasi & Sandchompoo, 2013).

In 2019, The Office of the Higher Education Commission and Thailand’s Ministry of Higher Education, Science, Research and Innovation revised the cooperative-education system from WIL to CWIE to increase the number of relevant courses in higher education (bachelor’s degree programs) by ordering higher-education institutions to work with enterprises in the public, private, and community sectors to produce high-performing graduates. The curriculum is co-taught between higher-education institutions and external agencies to give graduates the competencies necessary in the labor market (Batpho, Perkhiao, & Kanlaor, 2022). The objective of CWIE is to enable educational institutions and enterprises to cooperate academically and professionally in the operational process. The university provides cooperative education courses, and enterprises provide job positions appropriate for cooperative-education students. The university and enterprise jointly supervise students at the workplace and evaluate their performance (Kerdhan et al., 2021).

In conclusion, cooperative education refers to an education system that provides teaching and learning in educational institutions as well as direct experience in workplaces in a systematic way, with cooperation from the business establishment and all parties involved. It is an educational system that combines study with work and is considered a mission-based relationship (engagement) between educational institutions and business establishments. The objectives of CWIE are to prepare students for career development and experience; prepare them to enter the labor market; give them more experience in academic, professional, and personal development that has value beyond internships; provide the private sector and academic institutions with opportunities to develop the quality of graduates; and make curricula and teaching more relevant to the labor market's needs.

3. Methods

In this study, we used secondary data related to cooperative education. We collected data from published research reports, websites, and previously conducted surveys. In addition, we collected data from research articles published in the Thailand Citation Index. We followed the five research steps: identify the research topic, identify the data source, collect data, combine and compare the data, and analyze the data using content and descriptive analysis. One limitation of this study is that we collected all data from secondary sources and used existing data, which is not representative of all phenomena; however, the study’s results can help universities in other countries develop cooperative education in the future.

4. Results

Cooperative-education processes and procedures require cooperation among educational staff and departments, the advisor for the subject area, students, and enterprises. The process, benefits, obstacles to, and factors for success of cooperative education are as follows.

4.1. Process of Cooperative and Work-Integrated Education in Thailand

In this section, we collected our data from the following sources: The Center for Cooperative Education and Career Development; Suranaree University of Technology, Thailand; The Center for Cooperative Education and Career Development; Walailak University, Thailand; the Faculty of Management Science, Silpakorn University, Thailand; and the Faculty of Engineering, Khon Kaen University, Thailand. We summarize the processes in Table 1.

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| 1. Provide a place for cooperative education | • Students contact entrepreneurs to request cooperative-education opportunities.  
• When entrepreneurs accept students to work in cooperative education, students must fill out a request for cooperative-education work and submit it to their home faculty. The advisor signs it to certify.  
• When the faculty receives the documents from the student, it will send the enterprise documents requesting acceptance of students to perform cooperative-education work at the workplace.  
• When the enterprise accepts the student to work in cooperative education, the faculty informs the student.  
• Students fill out an application to participate in cooperative education that has been certified by their parents and sent to the faculty at least 1 month before going to work in cooperative education.  
• Before going to work in cooperative education, students must attend training to prepare for cooperative-education work. |
| 2. Practice and supervise cooperative education (At least 16 weeks) | • During students’ first 3 weeks in cooperative education, they must submit the topic of their cooperative-education report to their advisor.  
• Every month, students are required to submit a progress report on their cooperative work to their advisor. |

Table 1. Procedures of cooperative and work-integrated education in Thailand.
4.2. The Beneficial and Obstacles of Cooperative and Work-Integrated Education

Cooperative education and CWIE emphasize work in enterprises or organizations that systematically use graduates before graduation. The challenges and obstacles of CWIE in Thailand follow.

4.2.1. The Benefits of CWIE

Cooperative education emphasizes experience gained from work-based learning by allowing students to perform real work full-time at workplaces in their professional field. Work is defined as a special project that can be completed within 4 months of cooperative education. In addition, cooperative education helps graduates learn and develop skills suitable for organizations (enterprises) that employ graduates. Moreover, CWIE gives graduates more professional knowledge, abilities, and skills; systematic work planning skills; and the ability to make decisions, solve problems, and gain human relations, initiative, discipline, morality, ethics, communication, presentation, and leadership skills (Darayon, 2013). Cooperative education can help graduates develop confidence at work. When they finish their studies, graduates can apply their cooperative-education experience to their current work. Students who participate in cooperative-education programs have more experience finding work and working; develop a systematic way of thinking; have more motivation to study; have more problem-solving skills; can apply theory, including in communication and human relations; develop self-confidence; and are more professional in their work (Luekitinan et al., 2015).

4.2.2. Obstacles to CWIE Management

CWIE has problems related to knowledge and understanding of cooperative-education principles. Some organizations do not see the benefits of cooperative education and believe the associated burden has increased with the steps and difficulties in management as well as lack of connection at the policy level among higher-education institutions, government agencies, and organizations (Napasi & Sandchompoo, 2013). The management problems in CWIE arise in preparation and planning, so the educational institution should coordinate with the entrepreneurs for at least one semester to have more time to prepare the students. The faculty stated they had an insufficient budget to cover transportation expenses for travel to supervise an increased number of students. In addition, the supervisor in the workplace does not have time to take care of and teach work to students. In fact, some supervisors do not assign work to students, and some workplaces have students doing work that is inappropriate for them and repetitive, such as making coffee, carrying documents, and personal assistance. In addition, students lack fluency in English and sometimes do not have self-confidence while performing tasks. For example, they may not be brave enough to make decisions, lack detail and thoroughness in their work, and encounter difficulty communicating in foreign languages, such as English. Some companies provide job mentoring systems to students, but there has never been any training for mentors to know what tasks to teach to interns (because the boss ordered them to be mentors), and they did not know what work to teach the students (because they did not have a teaching plan), so most did their own work rather than teach students (Jensantikul, 2022; Sangsiri, Jamsawat, Jamsawat, & Saetung, 2019).

4.3. Key Success Factors for CWIE Management

There are several key success factors for CWIE management presented in Figure 1.

1) Preparing knowledge before performing work helps prepare people for internships (practical training). It involves enhancing skills and work experience and applying theory in practical training during the period. Knowledge and experience the students gain will help them see their work accurately and help them understand the real future labor needs.

2) Cooperative-education supervision involves a mutual exchange of knowledge among professors, establishments, and students. Delivery students go to live in the workplace to enhance their life skills. Students must follow up on their work. Cooperative-education supervision leads to learning about real working conditions and the organization’s culture, applying academic knowledge and abilities to actual work.

3) Using tools/equipment in training at workplaces in organizing education requires facilities for teaching and learning, such as work equipment and the building/factory. For clarification on the use of tools/equipment, a manual for tools/equipment should be provided that explains the content in detail and accounts for social changes and industrial business.

4) Effective time management during teaching and learning will result in the completion of cooperative-education courses according to agreements with the business establishment and students.

**Table:**

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| 3. Present the results of cooperative education and educational evaluation | - After completing cooperative work, students present their work in the field of study, with the schedule and details of documents to be submitted.  
- There is a committee to evaluate the student’s performance and submit a report on the student’s academic results. |
5) Regarding technology and innovation transfer, business establishments should arrange for mentors that match the field of study to facilitate technology transfer at the establishment. This will enable the students to learn about the requisite technology.

6) Students’ academic skills influence the effectiveness of learning management and CWIE courses at the university. With their gained knowledge and skills, students will learn more about themselves as well as their interests, aptitudes, and future life to plan for further studies or entering the labor market, emphasizing professional competencies and promoting higher-education studies (Chaisaen, Yongsorn, & Ponathong, 2018).

7) A cooperative-education-management system (digital platform) is a system developed to help manage documents and information about cooperative education that are collected in a single database to increase convenience. Users can better manage websites, documents, and student information. Students can search for information, download documents, and fill out documents to send through the system (Thanapiyawanich, Polnigongit, & Ruksasuk, 2020; Tratsaranawatih & Jariyapoom, 2018).

Figure 1. Key success factors of CWIE management.

5. Conclusion

Cooperative education is an integrated educational arrangement between higher education institutions and business establishments. To prepare students for careers and entry into the labor market before graduation, develop the quality of graduates according to the labor market’s needs, and improve the quality of Thai graduates in CWIE, higher education institutions must operate in accordance with the Cooperative Education Operations Standards of the Thai Cooperative Education Association in order to build confidence among students and establishments that accept students for work. Meanwhile, the business establishments that participate in cooperative education must align with the student’s professional field, and there is a clear policy of supporting cooperative education and assigning supervisors to give advice or convey work to students.

To develop cooperative education, information systems or digital platforms must be developed (Thanapiyawanich et al., 2020). A welfare system must be developed for students who work in cooperative education that includes accident insurance, medical treatment, and a reasonable daily wage (Chantragatrawi, Wattananarong, Somprasonk, & Boonthima, 2018). To develop the quality of graduates through cooperative education, higher education institutions must accelerate improvements in learning and teaching to fully develop professional and academic knowledge skills for students, promote and develop academic faculty members’ expertise in specific professions for supervision, and cooperate with business establishments to further develop the quality of Thai graduates (Kongsoma, 2012).

Finally, with the current economic situation, competition in the labor market will likely be quite high. The knowledge, skills, and qualities that enterprises need include creativity, working efficiently, trustworthiness, self-development, decision-making and problem-solving skills, human relations, communication and presentation, discipline and responsibility, morality and ethics, and leadership. The challenge for today’s graduates is to have more opportunities to apply knowledge learned from the classroom, create learning experiences from real situations at the workplace, and develop professional and self-development skills. These skills will be learned and developed quickly when students have the opportunity to work in the workplace.

References


