Research Project

(Final Report)

บทเรียนออนไลน์ต้นแบบเพื่อเตรียมความพร้อมของนักศึกษา

วิชาเอกภาษาอังกฤษในรายวิชาสหกิจศึกษา

A prototype online module to prepare English-major students for Cooperative and Work Integrated Education (CWIE)

By

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Executive Summary

This research focuses on the development of a prototype online lesson titled A prototype online module to prepare English-major students for Cooperative and Work Integrated Education (CWIE), designed using the Dick and Carey instructional design model. The objective of the study is to equip university students with the necessary mindset and skills to successfully adapt to cooperative education experiences and workplace challenges. The study addresses key challenges such as workplace adaptability, resilience, and self-directed learning, which are essential for professional success.

The research follows a structured instructional design approach, utilizing the ADDIE model to systematically analyze, design, develop, implement, and evaluate the online lesson. A needs analysis was conducted to assess students' preparedness for cooperative education, revealing common difficulties such as lack of confidence, difficulties in handling workplace expectations, and challenges in professional communication. The study highlights the importance of integrating growth mindset principles into cooperative education programs to enhance students' readiness for the workforce. It also underscores the value of work-integrated learning (WIL) as a means to bridge the gap between academic knowledge and real-world applications.

Key Recommendations:

1. Cross-Disciplinary Applications: Apply the growth mindset training model to other academic fields to improve student adaptability across various professions.
2. Institutional Integration: Collaborate with universities and employers to integrate growth mindset training into cooperative education curricula.

This study concludes that a structured and well-designed online lesson can significantly enhance students' growth mindset, preparing them for the challenges of cooperative education and beyond. Future research and continued development of online learning interventions will further strengthen the role of digital education in career readiness.

Abstract

This study explores the development of a prototype online lesson titled "Growth Mindset for Preparation in Cooperative Education" using the Dick and Carey instructional design model. The research aims to address key challenges faced by university students in cooperative education programs, such as workplace adaptability, problem-solving, and resilience. The study follows a structured instructional design approach, incorporating the ADDIE model to ensure systematic lesson development, implementation, and evaluation.

Findings from formative and summative evaluations indicate that the online lesson positively impacted students' understanding and application of growth mindset principles. Students who engaged with the lesson demonstrated improved adaptability, self-directed learning, and problem-solving abilities. The study also highlights the importance of integrating work-integrated learning (WIL) strategies to enhance students' readiness for professional environments.

The research concludes that fostering a growth mindset through structured online learning significantly benefits students in cooperative education, equipping them with essential skills for workplace success. Future recommendations include expanding lesson content, incorporating blended learning approaches, and conducting longitudinal studies to assess the long-term impact of growth mindset training on students' career development.

Keywords: Growth mindset, Cooperative education, Work-integrated learning, Instructional design

บทคัดย่อ

การศึกษานี้มุ่งเน้นการพัฒนาบทเรียนออนไลน์ต้นแบบเรื่อง "Growth Mindset for Preparation in Cooperative Education" โดยใช้แบบจำลองการออกแบบการสอนของ Dick และ Carey เพื่อแก้ไขปัญหาสำคัญที่นักศึกษาวิชาเอกภาษาอังกฤษ สำนักวิชาศิลปศาสตร์ มหาวิทยาลัยในหลักสูตรสหกิจศึกษาเผชิญ เช่น การปรับตัวในที่ทำงาน การแก้ปัญหา และความยืดหยุ่นในการทำงาน งานวิจัยนี้ใช้กระบวนการออกแบบการสอนตามกรอบ ADDIE เพื่อให้เกิดการพัฒนาบทเรียนต้นแบบอย่างเป็นระบบ

สรุปได้ว่าการปลูกฝังแนวคิด Growth Mindset ผ่านบทเรียนออนไลน์ที่มีโครงสร้างชัดเจน สามารถช่วยให้นักศึกษาในหลักสูตรสหกิจศึกษาพัฒนาทักษะสำคัญที่จำเป็นสำหรับความสำเร็จในที่ทำงาน ข้อเสนอแนะในอนาคต ได้แก่ การขยายเนื้อหาบทเรียน การใช้รูปแบบ Blended Learning และการศึกษาผลกระทบในระยะยาวของการฝึกอบรม Growth Mindset ต่อการฝึกปฏิบัติงานของนักศึกษา

คำสำคัญ: Growth Mindset, สหกิจศึกษา, Work-Integrated Learning, การออกแบบการสอน

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Chapter 1
Introduction

1.1 Background and Significance

The Cooperative Education course at Mae Fah Luang University is designed to help students become well-rounded individuals who can successfully enter the workforce. This course lays an emphasis on functioning in a systematic workplace by exposing students to real-world internships and jobs. Goals include helping students build their resumes, gaining work experience, and preparing them to enter the workforce or start their own businesses. Students are required to work full-time for at least four months straight according to the business's operating hours and complete at least six credits throughout the program. According to Table 1, 196 students from the Faculty of Liberal Arts would be interning in academic year 2022. Most of these interns will be working for private companies.

Table 1 *Classification of students by kind of institution academic year*

Academic year	Total	private sector	public sector	state enterprise	associations and foundations
2021	179	129	38	11	1
2022	196	166	21	7	2
Total	375	295	59	18	2

source Power BI: https://bi.mfu.ac.th/internship/

According to data collected by the Student Employment and Internship Division of Mae Fah Luang University, which is accessible https://bi.mfu.ac.th/internship/, there were primarily three types of problems that students had during their internships: First, there's the problem of students not wanting to find a job, which stems from their inability to prioritize and recognize their own strengths and weaknesses. The second concern is that students often struggle with issues related to organizational culture and social skills. For example, they may encounter coworkers who use inappropriate language, have poor interpersonal skills, struggle to collaborate, and have trouble

adjusting to the workplace. Finally, there's the problem of students relocating to different companies for a variety of reasons, such as health issues, excessive costs, a lack of internship mentors, the company going out of business, etc. In conclusion, there are numerous ways in which interns from other schools' struggle to adapt to the working world, such as dealing with colleagues, dealing with high expectations set by the employer, and navigating the cultural differences that exist in the workplace. The issues highlighted suggest that if the school promotes a growth attitude among its students, they will be better able to solve difficulties and work together more effectively.

When people adopt a growth mindset, they see their own abilities as valuable and work to improve their conduct. The fundamental premise is that with consistent, focused work and new knowledge, any person's talents can and do improve over time. Thus, students who adopt a growth mindset will have the courage to face challenges head-on, view setbacks not as problems but as chances to learn and grow and persevere through thick and thin.

Work adaptation is distinct from classroom adaptation, which involves research, presentations, and exams. However, challenges emerge in the workplace when students are tasked with achieving something unfamiliar to them. Students face challenging assignments. Collaborating with individuals we may not favor, including introverts, is frequently essential for specific tasks. Ultimately, the responsibility lies with the students to produce high-quality work. For self-directed learning, students need to have a strong desire to engage in independent study. Power does not enforce responsibility or order. Consequently, students ought to proactively pursue new information during their own time and engage in significant learning experiences; such activities will cultivate a culture of ongoing education (lifelong learning). Issue 5 of the Mae Fah Luang University Development Plan (2022–2026) highlights the project aimed at cultivating human resources capable of becoming lifelong learners as a vital initiative for the institution. The university seeks to enhance the experience of its students by cultivating an atmosphere that promotes learning and development. The curriculum aims to foster global citizenship among students while providing them with essential skills for the future, including critical thinking, entrepreneurship, change leadership, and professional ethics. It will also prepare faculty to be adaptable and responsive to new circumstances. Ultimately, it will collaborate with businesses to develop up-to-

date and pertinent curriculum that addresses job vacancies. The initiative involves developing tailored short-term courses such as upskilling, reskilling, and acquiring new skills to meet the specific needs of both individual learners and businesses.

The School of Liberal Arts' program for student preparation includes classes, seminars, and other extracurriculars designed to get students ready for life after college and the workforce. To help students understand the importance of collaborative learning during their internship, it is recommended that they attend workshops, employment lectures, and pre-internship information sessions. Opportunity preparation, application and deadline specifics, interview practice, employer expectations, and internship evaluation guidance are all parts of this course. Guests and professors work together on this course to help students get the skills they need for the workforce. Classrooms, online, or hybrid means of delivery are all acceptable for teachers' activities. Through the accompanying activities, students can hone their resume writing, cover letter crafting, networking, and interviewing abilities. Career planning and other self-study subjects are now available. Custom Resumes Professionalism on the Job Workplace Security Presentation abilities, business acumen, creativity, etc., are all essential in the modern day.

This is a synopsis of the findings from the 2022 academic year's evaluations of the employability of English majors from the Faculty of Liberal Arts at Mae Fah Luang University, as perceived by their supervisors and employers. The findings of the evaluation of the practical capabilities of Mae Fah Luang University graduates are summarized in Table 2.

Table 2 Summary of the results of the evaluation of Mae Fah Luang University graduates' practical skills.

Future skills	**Mean**
1. Creativity	4.43
2.Analytical thinking and problem solving	4.57
3. Digital literacy	4.57
4. Lifelong learning	4.57
5.Resilience and flexibility	4.67

Future skills	Mean
6.Empathy and voluntary	4.71
7.Leadership and social influence	4.14
8.Collaboration and teamwork	4.57
9.Communication and media literacy	4.57
10.Cultural and civic literacy	4.29

Table 2 shows that the averages of various abilities are as follows: leadership and social influence skills are at the bottom of the list at 4.14, while empathy and voluntary skills are at the top with 4.71. Considering the foregoing, the primary objective of this study is to design a sample online course that will help English majors become ready for cooperative education.

1.2 Research/innovation Objectives

To design a sample online course on "Developing a growth mindset in order to succeed in cooperative education courses."

1.3 Conceptual framework

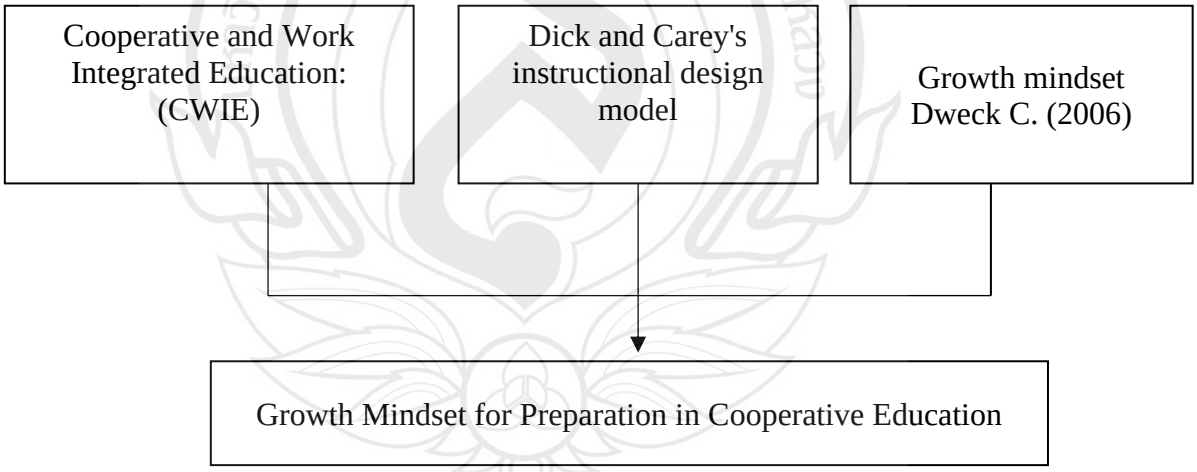

Figure 1 Conceptual framwork

1.4 Anticipated outcomes

Obtaining a prototype online lesson plan titled "Growth Mindset to Prepare for Cooperative Education.

1.5 Scope

An early version of the online lesson titled "Growth mindset for preparation for cooperative education" in the School of Liberal Arts in academic year 2024.

1.6 Operational Definition

Prototype: A first version of an online learning course which includes lessons activities to help English-major students get ready for Cooperative and Work Integrated Education (CWIE).

English-Major Students: University students studying English as their main subject. Their studies focus on English language skills, literature, communication, and professional skills needed for work.

Growth Mindset: The belief that students can improve their skills and knowledge through effort, practice, and learning. In this study, it means that English-major students are willing to face challenges, learn from mistakes, and keep improving their abilities for success in Cooperative and Work Integrated Education (CWIE). A growth mindset helps students stay positive, work hard, and develop important skills for their future jobs.

Chapter 2
Related Works

The researcher examined the theoretical concepts and related research in the project's prototype online lesson to prepare English major students for cooperative education courses in the following.

2.1 Cooperative and Work-Integrated Education (CWIE)

The four principal missions of Thai higher education institutions are the preservation of arts and culture, provision of academic services to society, research, and instruction. The educational missions must align with academic and professional standards as well as labor market requirements to produce a proficient knowledge workforce capable of advancing the nation and enhancing its competitiveness. One approach to improving the attributes of graduates is to establish an educational framework that combines theoretical learning with practical experience (work-integrated learning: WIL). WIL is an educational approach that enables students to use their knowledge, professional competencies, and specialized skills in diverse contexts. Cooperative Education is a mode of integrated education linked to prevalent global employment and associated with professional practice. Cooperative Education is a structured educational framework that alternates between academic instruction at educational institutions and practical experience in the industry, according to Wichit Srisa-on and Alongkot Yawai (2009: p. 6).

Currently, Thailand's higher education institutions are implementing the cooperative education system on a widespread scale. This is due to the recognition of the significance of preparing students for career development and employability prior to graduation, as well as the necessity of enhancing the quality of graduates to meet the demands of the labor market. The research findings indicate that graduates of the cooperative education program are employed within a brief period following their graduation (Suranaree University of Technology, 2006). Suranaree University of Technology, located in Nakhon Ratchasima Province, has been a pioneer in the development of the cooperative education system since 1993. It was subsequently expanded by other higher education institutions, such as Walailak University and King

Mongkut's Institute of Technology North Bangkok. Naresuan University, Rajamangala University of Technology Thanyaburi, and others. Over the past two decades, there has been substantial advancement in the operations of cooperative education in Thailand. In 2002, cooperative education was implemented by only 17 educational institutions. The number of educational institutions that organized cooperative education was as high as 75 in 2011, and it is continuing to grow. The Office of the Higher Education Commission has aided higher education institutions in the organization of cooperative education in terms of policy and budget.

2.1.1 The significance and significance of Cooperative and Work-Integrated Education (CWIE)

Work-Integrated and Cooperative Education (CWIE) is an educational approach that combines classroom instruction with practical work experience in the workplace to provide students with real-world work experience while they are still studying. This method emphasizes the acquisition of skills that are essential for the labor market and the preparation of students for future employment. In addition to the academic skills that are taught in the classroom, the skills that are acquired in CWIE include practical skills such as adaptability, communication, teamwork, and problem-solving in a swiftly changing work environment.

2.1.2 The significance of CWIE in relation to the skills that are necessary in the contemporary labor market

The 21st-century labor market necessitates individuals who possess a broader range of professional skills than those that can be acquired through classroom instruction. The following abilities are significantly enhanced by CWIE:

1. Critical Thinking and Problem-Solving Organizational apprenticeships provide students with the opportunity to engage in intricate, real-world scenarios that necessitate effective decision-making and analysis.
2. Collaboration and communication. Students can cultivate effective communication skills by working in teams with individuals from a variety of origins and cultures in the workplace.

3. Lifelong learning and adaptability skills: Experiencing novel challenges in the workplace enables students to develop the ability to adapt and devise innovative solutions.
4. Digital skills and technology utilization: The contemporary labor market necessitates individuals who can utilize contemporary tools and technologies in their professional endeavors.

Students are more prepared for employment upon graduation by incorporating internships into their education, which allows them to acquire real-world skills. The CWIE approach has been employed to cultivate the potential of students in the tertiary education system in numerous countries, as evidenced by successful CWIEs. For instance, Canada is a pioneer in the implementation of CWIE at the university level. Numerous universities, including the University of Waterloo, mandate that students participate in apprenticeships or work placements at organizations for a period of several months prior to their graduation. Research has demonstrated that students who successfully complete these programs have a greater likelihood of securing employment in their field of study than those who do not enroll in CWIE. CWIE has been incorporated into the curricula of numerous Australian universities, including RMIT University, with a particular emphasis on engineering and architecture. To enhance their adaptability to the workplace and implement their knowledge in real-world scenarios, students are obligated to complete internships with private or public sector organizations. Duale Hochschule Baden-Württemberg (DHBW) is a university in Germany that emphasizes CWIE in collaboration with industry. Students are obligated to work in companies as part of their programs, which equip them with real-world skills and experience that will enable them to immediately integrate into the workforce upon graduation.

In Thailand, numerous universities have implemented the CWIE methodology to enhance the employability of students and enhance their abilities. A prime illustration is King Mongkut's University of Technology Thonburi (KMUTT), which implements a cooperative education program that motivates students to participate in extended internships at authentic organizations, with a focus on establishing a connection between the theories acquired in the classroom and their practical application. Students who have interned at engineering organizations in Thailand have gained hands-on

experience in the design and development of technical systems with the assistance of consultants from the companies. This case study demonstrates the success of CWIE in Thailand. Specifically, students have been provided with an overview of the actual work process. Many students can secure immediate employment after graduation as a result of the work experience, they have acquired, which they can immediately implement within the organization. An additional illustration is Kasetsart University, which offers internship programs in collaboration with numerous private agricultural enterprises. Students who successfully complete these programs acquire expertise in contemporary agricultural technologies and farm management. Upon completion of their studies, numerous students secure employment with agricultural organizations due to their proficiency in the technologies that these organizations require.

CWIE is instrumental in equipping students with the necessary skills and knowledge to succeed in the contemporary workforce, which necessitates more than just academic proficiency. Students acquire critical work skills, including adaptability, communication, and problem-solving, through on-the-job training. Additionally, CWIE assists students in establishing professional networks and securing more favorable employment opportunities. The implementation of CWIE in Thai universities, including KMUTT and Kasetsart University, has demonstrated effectiveness in enhancing the work readiness of students.

2.1.3 Student preparation and the current educational context

Education systems worldwide are confronted with novel obstacles associated with technological, social, and economic transformations in the 21st century. It is more critical than ever to prepare students for the future of work, particularly in an era where the labor market requires a workforce that is intellectually flexible, possesses lifelong learning skills, and can acclimate to a changing work environment.

The acquisition of practical and academic abilities

Today's education is not restricted to theoretical learning in the classroom; it also prioritizes the acquisition of real-world skills, including professional skills like effective communication, collaboration, and inventive problem-solving. The integration of knowledge from various disciplines to address real-world issues in professional settings has become an essential component of education. Today's

graduates require both critical thinking skills and skills that can be immediately employed in the workplace, such as the capacity to work in a team, utilizing digital technology to resolve issues, and developing the ability to work in a culturally and intellectually diverse environment. It is imperative to cultivate these abilities to adequately equip students for the forthcoming labor market.

The significance of combining education with work instruction (Work-Integrated Learning)

Work-Integrated Learning (WIL), also known as the integration of education and work placements, is a method that is being increasingly pursued by universities worldwide. This is since work placements enable students to acquire real-world experiences that not only improve their knowledge and comprehension of the subject matter but also provide them with the skills necessary to effectively apply the knowledge in the workplace. By incorporating WIL into the teaching and learning process, students are exposed to real-world challenges, including the ability to solve problems, respond to unforeseen circumstances, and work within the constraints of time and resources.

Additionally, WIL assists in the establishment of positive relationships with enterprises and organizations, which are significant sources of educational resources for students. Additionally, students can better adapt to the requirements of the labor market by having the opportunity to work in real-world situations. In addition, WIL is a valuable instrument for establishing professional networks, which may result in future employment opportunities.

The difficulty of preparing students for the 21st-century workplace

There are numerous obstacles associated with preparing students for the 21st-century workforce. One of the primary obstacles is the changing nature of technology and digital advancements, which implies that skills that were once in high demand may not be adequate in the present day. Students must possess a comprehensive understanding of digital skills and information technology, including the ability to work with big data, conduct data analytics, and incorporate artificial intelligence (AI) into their work processes. Additionally, they must cultivate lifelong learning abilities to enable them to adapt and acquire new ones as they age.

Another obstacle is the acquisition of communication and collaboration abilities. Effective communication in these contexts is crucial, as the 21st century frequently necessitates collaboration with individuals from a variety of cultures, dialects, and intellectual perspectives. Negotiation, compromise, and conflict resolution skills are also essential for teamwork. These abilities are not typically taught in traditional academic environments, but they can be acquired through on-the-job training.

In today's world, students must possess the ability to solve problems, which is another critical talent. In the professional realm, issues are frequently intricate and lack definitive solutions. Consequently, students must possess critical thinking and creative problem-solving abilities to confront novel obstacles. However, they must also possess the ability to manage change and uncertainty, as the current work environment is highly uncertain and necessitates rapid adaptation.

In conclusion, the present educational environment prioritizes the preparation of students for employment in a world that is undergoing accelerated transformation. It is imperative for students to cultivate both academic and practical skills in order to not only overcome future obstacles but also to progress in their careers in a sustainable manner. Integrating education with work-based training, such as WIL, is a critical method for preparing students for the workforce and fostering the development of essential skills such as communication, collaboration, and problem-solving, which are essential in the labor market.

2.2. The Instructional Design Model of Dick and Carey: Principles and Components

Instructional design is a systematic process that is employed to investigate learner needs and instructional issues to identify solutions. This process may involve the enhancement of existing problems or the development of new ones by incorporating learning and teaching principles. The objective of instructional design is to improve the efficacy of learning. In 1978, Dick and Carey introduced the Dick and Carey Instructional Design Model, a system of instructional design that prioritizes structure and system. This model is composed of interconnected phases that are designed to optimize the instructional process. This model is appropriate for the development of all forms of learning, including online learning and classroom instruction, as it emphasizes

the establishment of precise objectives, the analysis of learners, and the assessment of learning outcomes.

Dick and Carey's instructional design model comprises the following elements:

1. Identify Instructional Objectives Begin by evaluating the situation or issue that necessitates attention or enhancement. Afterward, establish learning objectives—clear and measurable objectives that will assist in determining the learner's objectives upon completion of the course.
2. Perform an instructional analysis. During this phase, the designer evaluates the behaviors and knowledge that learners require to accomplish the learning objectives. The content or skill is deconstructed into its constituent parts to offer a comprehensive understanding of the material that must be taught.
3. Evaluate learners and contexts. Adapt the content and teaching methods to the target audience by examining learner characteristics (e.g., age, preexisting knowledge, learning experiences) and the context in which they will learn (e.g., classroom, online learning).
4. Performance Objectives Writing In this phase, the designer formulates measurable, unambiguous learning objectives that emphasize the behaviors or capabilities that learners will exhibit upon achieving the objectives.
5. Development of Assessment Instruments: Develop assessment instruments (e.g., tests or assignments) that evaluate learners' progress in accordance with predetermined objectives.
6. Instructional Strategy Development: The development of teaching strategies that are intended to facilitate learning, including the use of media, the presentation of content, and the methods of learner participation, in order to ensure that the teaching and learning process accomplishes its objectives.
7. Instructional Materials: Create or choose instructional materials that are in accordance with the objectives and strategies that have been established, including computer programs, videos, and textbooks.
8. Design and conduct learning experiences (Design and Conduct Formative Evaluation), evaluate teaching during the process (Formative Evaluation) to enhance and develop for greater efficiency, evaluate after teaching (Design

and Conduct Summative Evaluation), and evaluate learning outcomes at the end of the teaching process (Summative Evaluation) to determine whether teaching and learning have achieved their objectives.

Dick, Carey, and Carey (2001) and Smith and Ragan (1999) have noted that the instructional system is advantageous for teaching management for the following reasons. The instructional system is akin to a blueprint that arranges the diverse elements of teaching and learning in a systematic manner. This enables teachers to be aware of the teaching objectives, the teaching and learning management processes, and the assessment of learners, thereby facilitating the preparation of teachers for teaching and ensuring implementation readiness. Encourage the implementation of effective teaching management, which involves the ability to manage operations in a manner that is both efficient and effective, while also conserving time and resources. This is preferable to teaching leadership that lacks a system, as the latter will result in confusion due to the lack of clarity in the objectives and the inability to regulate operations. Assist educators in identifying challenges and determining the most suitable solutions to educational concerns. A process control system is in place to identify the issues that are influencing the learning outcomes of students. What portion of the endeavor entails the identification of the appropriate and appropriate solution? Assisted educators in utilizing the evaluation results and recommendations as a source of information to enhance the quality of teaching and learning.

Various educational products, including printed media and technological media, are produced because of the implementation of systematic methods in the development of instructional media. These products are of high quality and beneficial to a diverse audience. Learning goals encompass the determination of learning objectives and content. This content is derived from the curriculum's knowledge, the learners' requirements, and social needs. It is essential for instructional designers and teachers to possess a comprehensive comprehension of the types of content, the criteria for content selection, the format for use, and the arrangement of content. They must ascertain which content is suitable for the purpose of instructing students.

Consequently, the development of students to accomplish specific learning outcomes should be the primary focus of the design of teaching methods and activities. The key to implementing outcome-based education is for the instructor to transition

from a lecturer to a facilitator, thereby facilitating the transition of students from lecture-based learning to activity-based learning or active learning. 2. Evaluators can develop a method to assess learning outcomes that are observed in real-world scenarios and are indicative of learning outcomes. This will enable students to address their learning deficiencies and achieve their desired learning outcomes. 3. As a consultant (Consultant), the teacher can encourage students to identify solutions independently or provide suggestions for resolving issues when they encounter learning difficulties (Nakkeeran, R., Babu, R., Manimaran, R., & Gnanasivam, 2018).

2.2.1 Utilization of Dick and Carey's Model for the development of online lessons

The Dick and Carey model is well-suited for designing online courses due to its ability to establish a responsive and systematic learning structure for learners. The design of online lessons must consider the skills that are essential in the contemporary era, including the development of skills that are applicable in the labor market, collaborative learning, and problem-solving.

Creating a problem-solving environment using Dick and Carey's model in the development of online courses, such as the development of simulations or case studies that engage students in the resolution of real-world problems, can be beneficial. It is also possible to improve students' problem-solving abilities by developing assessment instruments that evaluate critical thinking and decision-making.

Collaborative Learning Collaborative learning can be incorporated into online lessons by creating activities that require students to collaborate, such as discussion forums or working in groups through online platforms. Collaboration with peers in the development of communication and collaboration abilities is facilitated by engaging in problem-solving or solving problems.

Dick and Carey's model emphasizes learner and context analysis, which can assist in the development of online lessons that are customized to the specific requirements of learners (Learner-Centered Design). For example, we can create content that is consistent with the learners' current knowledge base and select instructional media, such as text, images, audio, or video, that are most appropriate for their learning preferences.

2.2.2 Establishing connections with the labor market's talents

The utilization of this model to create online courses not only facilitates the development of specific skills but also assists learners in the acquisition of skills that are in demand in the labor market, including critical thinking, collaboration, communication, and creative problem-solving. The model's emphasis on continuous measurement and evaluation procedures also enables instructional designers to precisely adjust lessons to meet the needs and abilities of learners. In summary, the Instructional Design Model developed by Dick and Carey is a highly effective instrument for the development of systematic instruction, particularly in the context of the increasing prevalence of online learning. The implementation of this model will facilitate the development of lessons that prioritize the development of problem-solving skills, participatory learning, and lesson design that is tailored to the students' requirements.

2.3 Growth mindset

Carol Dweck introduced the concept of growth mindset, which was inspired by psychological research on individuals' reactions to obstacles and failures (Dweck, 2006). Dweck classified an individual's mindset into two primary categories: a fixed mindset and a growth mindset. Individuals with a growth mindset are of the opinion that abilities can be enhanced through practice and endeavor (Dweck, 2006; Yeager & Dweck, 2012). In Dweck's (2007) research, it was discovered that individuals who possess a growth mindset are more likely to respond to failure and challenges with a greater effort, and it also has a positive impact on the development of students' resilience skills (Blackwell, Trzesniewski, & Dweck, 2007; Claro, Paunesku, & Dweck, 2016).

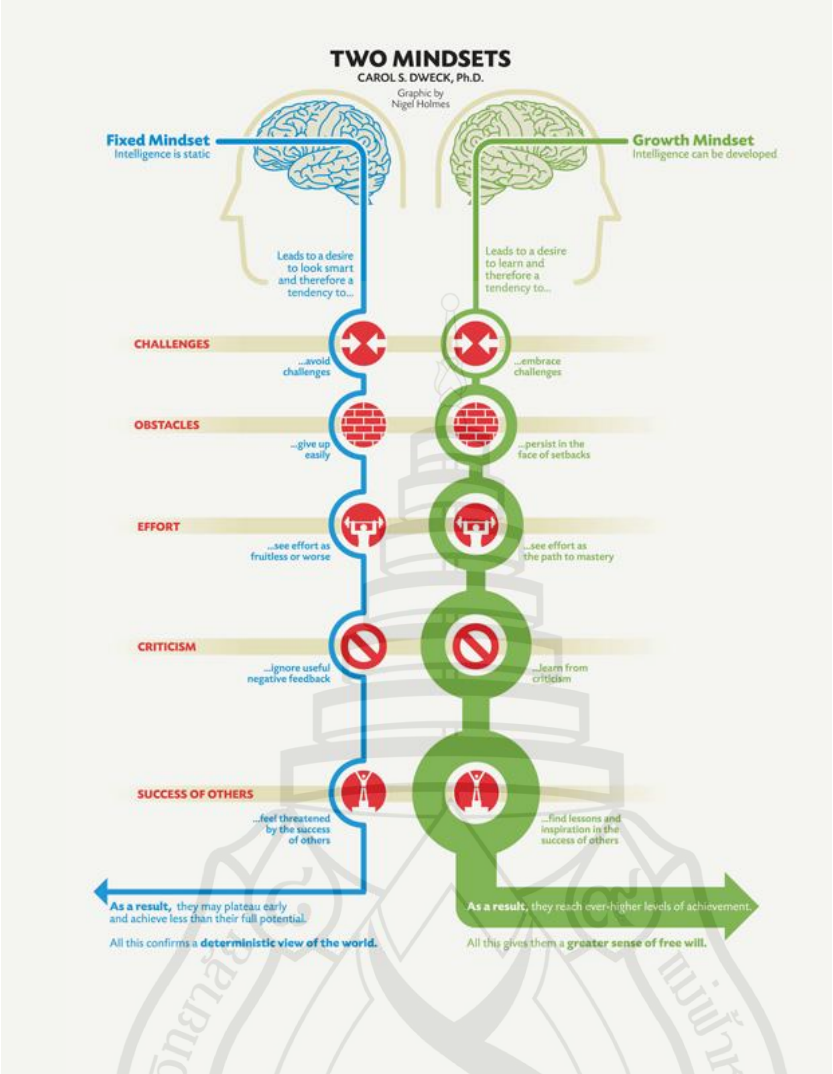

Figure 2 The Two Mindsets (Dweck, 2006)

2.3.1 The significance of a growth perspective in the development of students.

In contrast to students who maintain a fixed mindset, who perceive challenges as something to be avoided, those with a growth mindset perceive them as opportunities to learn and develop (Dweck, 2006). A growth mindset also motivates students to pursue lifelong self-development, which facilitates their ability to effectively manage failure (Yeager & Dweck, 2012; Zeng, Hou, & Peng, 2016). The cultivation of a growth mindset is crucial for the development of students, as it enables them to cultivate the necessary resilience to confront personal and academic obstacles. Students are encouraged to experiment with new ideas and not be intimidated by failure due to their conviction that they can enhance their abilities through persistence.

Adaptability in the face of obstacles

Students who possess a growth mindset perceive challenges as opportunities for learning and development, in contrast to those who possess a fixed mindset, who regard them as obstacles that should be circumvented. For instance, students who possess a growth mindset are more inclined to experiment with alternative methods of comprehending the lesson or seek assistance from their peers and instructors when they encounter challenges in a difficult subject, such as physics or mathematics.

The acquisition of lifelong learning abilities

Growth Mindset also motivates students to prioritize their eternal development, regardless of whether it pertains to academics or other life skills. Students are encouraged to pursue new opportunities to enhance their skills, whether they are academic or essential for their professional careers, when they recognize that their capabilities are not restricted by their genetic makeup.

Reacting to failure

In the learning process, failure is unavoidable. Students who possess a growth mindset perceive failure as an opportunity to learn and progress, rather than as a reason to give up or feel disheartened. This skill is essential for preparing for the working world, where challenges and failure are frequently a part of the development process.

2.3.2 The application of growth mindset in education

The primary objective of Growth Mindset Teaching is to alter students' perspectives regarding their learning processes and capabilities. For example, the cultivation of a growth mindset can be facilitated by creating an environment that promotes experimentation and errors, as well as prioritizing the learning process over the outcome (Boaler, 2013; Dweck, 2015). This concept can be applied in a variety of ways by teachers and instructors in the educational context. For instance, Method One: Emphasizing the Process Over the Result: Educators may emphasize the learning process over the results, such as recognizing persistence, effort, and problem-solving, rather than solely extolling test scores or results. This method assists students in recognizing that learning and endeavor are critical components of their personal growth. Method Two: Establishing a Secure Environment for Trial and Error: Learning should not be motivated by apprehension regarding failure. Establishing an environment in the classroom that fosters experimentation and permits students to make

errors can contribute to the development of their self-assurance. They will be encouraged to enhance their skills by acknowledging that errors are a natural component of the learning process. It is possible for educators to allocate time to instructing students on how to perceive challenges or obstacles as opportunities for personal development. For instance, educators may motivate students to consider how to resolve challenging issues and cultivate new competencies rather than dismissing them as beyond their capabilities when they encounter them in the classroom.

2.3.3 Self-development in the workplace with a growth mindset

Additionally, employees are motivated to maintain an attitude of perpetual learning and adaptability to workplace modifications when they adopt a growth mindset (Yeager & Dweck, 2012). In addition to acquiring knowledge, a growth perspective is also crucial in the workplace. The 21st century's work environment is in a state of perpetual flux, and individuals who are adaptable and able to adjust to these changes will be more successful in their endeavors.

Acquiring and refining new abilities

In the workplace, employees are perpetually confronted with technological advancements and the development of new skills. A growth mindset fosters an attitude of perpetual learning, the acquisition of new skills, and the recognition that one's abilities can be enhanced, thereby increasing the likelihood of success in their professional endeavors.

Overcoming obstacles in the workplace

Experiencing unexpected challenges and issues at work is a common phenomenon. By adopting a growth mindset, employees can approach challenges with a positive attitude, recognizing them as opportunities to acquire new skills and abilities.

Participating in self-improvement and receiving feedback

Additionally, individuals in the workplace are capable of constructively responding to feedback and criticism when they possess a growth mindset. Rather than interpreting the feedback as an assault or a blow to their confidence, they will employ these recommendations to enhance their performance.

Dweck's research illustrates the significance of a growth mindset in both professional and educational development. The instruction of this mindset can assist

students and employees in developing resilience in the presence of adversity and in their pursuit of ongoing self-improvement. To achieve success in all aspects of life, students and professionals must establish an environment that encourages learning and failure as integral components of their development.

The growth mindset, as defined by Limeri et al. (2020) and Ku & Stager (2022), is the conviction that one's abilities can be enhanced through learning and practice. This contrasts with the fixed mindset, which maintains that abilities are unalterable. Individuals who possess a growth mindset are more resilient, determined, and persevering in the presence of challenges and failures, which has an impact on their academic and professional success. The OECD (2019 a) also extracted lessons from the PISA 2 test, which compared the PISA results of Thai students in 2019 to those of other countries with higher test results. The analysis revealed that Thai students possess a more rigid mentality than their counterparts in other countries, and they are of the opinion that their abilities are irrevocable. Consequently, Thai students have lower PISA scores than students in other countries who possess a more growth-oriented perspective.

The results of a study that tested the intelligence levels of fifth-grade students in the United States, divided into three groups: a control group, an effort-focused group, and an ability-focused group, are described in this article by Dweck (2007), a renowned psychologist who studied the growth mindset and the fixed mindset. The findings indicated that individuals who prioritize effort exhibit a more growth mindset and perform better on tests, whereas those who prioritize aptitude exhibit a more fixed mindset and perform worse on tests. Growth mindset is a subject that influences the academic and professional success of students who are currently employed, as evidenced by the research.

Chapter 3
Methodology

This study project is systematically constructed in accordance with the ADDIE model, a recognized framework in instructional design and educational technology. ADDIE represents Analysis, Design, Development, Implementation, and Evaluation. This approach offers a methodical methodology for developing a prototype that is efficient and customized to address certain learning requirements. This work guarantees a thorough and systematic development procedure throughout each phase of ADDIE, from determining initial needs to the final evaluation of project outputs.

This chapter outlines the research methodology employed to develop and test the prototype online lesson titled "Growth Mindset for Preparation in Cooperative Education." The study follows a structured instructional design approach using the Dick and Carey model, ensuring systematic development, implementation, and assessment of the instructional content. The research objectives guiding this study is to design a prototype online lesson on developing a growth mindset for cooperative education preparation. The methodology is structured around the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) in alignment with Dick and Carey's instructional design framework.

3.1 Analysis

To begin the process of designing a prototype for an online course, a needs analysis is the first step. In this investigation, the focus is on investigating the various aspects that contribute to the development of good online lessons. Specifically, the following processes were carried out: Analysis of the Learner: A study was carried out on a group of students who were participating in cooperative education to investigate their knowledge, abilities, and experiences. This investigation included the students' comprehension of the growth mindset and the skills that are necessary for the role of cooperative education. To equip students to be flexible and to acquire abilities that will allow them to confront the challenges of cooperative education work, it is important to do content analysis. This involves studying the content that is connected to growth

mindset and linking it to skills that are needed in the labor market. Study the technological elements and preparedness of online learning systems in universities to take into consideration the platforms and tools that will be utilized in the process of creating online courses with the purpose of conducting a learning environment analysis.

The findings of the investigation focused on a certain group of students who were enrolled in the cooperative education class. The content that was relevant to growth mindset was analyzed, and it was linked to skills that are required in the labor market. The goal of this study was to equip students to be adaptable and to build abilities that will allow them to handle the obstacles that are associated with cooperative education. at addition, Learning Environment Analysis investigated the technological aspects of online learning systems at universities, as well as the readiness of these systems to take into consideration the platforms and tools that would be utilized to develop online lessons. We can draw the conclusion that the common challenges that students in cooperative education encounter have an effect not only on the students themselves, but also on their places of employment and the educational institutions they attend. These challenges are frequently brought on by a variety of internal elements that are present within the students themselves, such as a lack of responsibility, self-confidence, or the ability to work together effectively. A negative work atmosphere, tasks that are not a good match for their abilities, or inadequate supervision and advice from supervisors are all examples of external factors that might contribute to employee dissatisfaction. These issues prevent students from achieving their goals in terms of learning and self-development, and they may, in the long run, have an impact on the image of students, workplaces, and educational institutions. Cooperative education students who are majoring in English have several challenges, which can be broken down into three primary categories, which are as follows:

1. Concerns pertaining to behavior and discipline

1.1 A lack of accountability; regularly arriving late; frequently absent; and failing to adhere to the schedule that was given.

1.2 Absence of determination to work; tardiness in completing work; low quality; and behavior that has not altered despite being warned about it.

1.3 Behavior that is not suitable, the use of vulgar language, the wearing of earbuds while working, and the creation of an unfavorable environment

1.4 The failure to reply to contacts from both corporations and teachers is an example of a lack of communication.

2. Relationship issues at the workplace

2.1 There was a disagreement with the supervisor, she was criticized in front of other people, and she caused negative feelings.

2.2 I am dissatisfied with the scope of the task, and I believe that the work that has been assigned does not correspond to the position...

2.3 Dissatisfaction with the compensation, as well as the perception that the labor is outside the scope of the task that should be expected to be received

3. Problems with one's skills and capabilities

3.1 Inadequate working skills; the work that is delivered is of low quality and falls short of expectations.

3.2 In addition, there are additional issues, such as those that are of a personal nature. The expectations of students and those of the industry could not be compatible, and there is a possibility that personal issues could have an impact on employment.

According to the information presented above, the following are some of the potential factors that could lead to difficulties in the internships of students majoring in English:

1. Inability to be prepared for work Students might not have any actual job experience or might not be prepared to accept responsibility for the responsibilities that have been allocated to them.
2. It is possible that there is a lack of clarity in the communication that takes place between students, supervisors, and professors who are responsible for coordinating. This can result in misunderstandings.
3. There are very high expectations. There is a possibility that students have unrealistically high standards for their work, or that their employers have overly high expectations for them.
4. Working environment: The student's work may be impacted by a number of elements, including the fact that the working environment may not be favorable to work or that there may be other factors.

Table 3 A summary of the issues, their causes, and the answers

Problem	Possible causes	Corrective action guidelines
Inappropriate behavior	Lack of discipline , lack of responsibility , lack of understanding of corporate culture	Organize behavioral development training , create understanding of organizational culture , and set clear regulations.
Lack of responsibility	Lack of commitment to work , lack of time management skills	Motivate , provide advice on work planning , and evaluate work performance regularly.
Problems with adaptation	The work environment is different from what was expected , interpersonal relationships are not smooth.	Organize activities for students to get to know each other , provide advice on adjustment , and arrange for mentors.
Conflict with superiors	Miscommunication , different expectations	Provide training in communication skills , create understanding of the roles and responsibilities of each party
Job dissatisfaction	The assigned tasks do not match my interests and lack challenge.	Assess students' interests and abilities , and improve the variety of assigned tasks.

As far as the substance is concerned, having a growth mindset, which may be defined as the conviction that one's capabilities can be improved, has a substantial influence on learning and work, including internships. According to the findings of several studies, students who have a growth mindset are more likely to have higher levels of job satisfaction, higher levels of performance, and a greater likelihood of continuously learning and developing themselves. The following is a condensed version of the advantages that help students who have a growth mindset:

1. Work performance Students who have a growth mindset have a tendency to perform better in their work because they consider failure as an opportunity

to learn and progress. This enables them to better solve difficulties and adapt to new circumstances.

2. Employee contentment Students who have a growth mindset are more likely to be content with their professions because they see the importance of the learning process and the development of their own particular skills.
3. Students who have a growth mindset are more receptive to acquiring new knowledge and are always working to better themselves. They are also more open to learning new things.
4. Capacity to collaborate with others Students that have a growth mindset typically have higher teamwork abilities since they are aware that achievement is achieved via collaboration with others.

Taking into consideration the information presented above, it can be deduced that a growth mindset has an impact on the training and performance of students. Students who have a growth mindset view failure as an opportunity to learn, rather than a mistake that makes them appear to be less capable. Students are resolute in their ambition to continuously improve themselves, which enables them to triumph over challenges and accomplish their objectives. They can remain flexible in the face of new circumstances and are willing to adjust their methods of operation when it is required. In addition, students are receptive to the input that they receive from other people and can use it to better themselves. The findings indicate that having a growth mindset, which may be defined as the conviction that one's own capabilities can be improved, has a significant influence on internships. From this, we may draw the conclusion that for students to be eligible for the internship, they should exhibit the following attributes and talents that are congruent with their mindset.

The characteristics that students ought to possess

1. A belief that one is always capable of learning and improving, regardless of the challenges that one encounters, is an example of self-confidence.
2. Openness to new experiences, desire to acquire new knowledge, and openness to hearing the perspectives of others are all essential qualities.
3. The capacity to quickly adjust one's behavior in response to shifting circumstances.
4. Commitment: the determination to better oneself personally.

5. Endurance is the capacity to persevere through adversity and to endure mistakes.
6. Imagination can come up with a variety of solutions to challenges.

The abilities that students ought to possess

1. Able to clearly explain one's own thoughts and requirements, as well as the ability to understand the opinions of others, falls under the category of communication skills.
2. Interpersonal skills refer to the ability to collaborate well with other people.
3. Capable of analyzing problems and coming up with answers in a logical manner is a problem-solving skill.
4. Skills in time management include the ability to properly plan and manage one's time.
5. Skills in self-learning include the ability to conduct independent research and acquire new knowledge.

How Students Can Be Encouraged to Have a Growth Mindset

1. Make sure that the atmosphere is one that encourages learning. It is important to provide students with a secure setting in which they can explore and learn from their mistakes.
2. Offer direction and motivation to the individual. It is important to consistently provide students with direction and encouragement. Demonstrate gratitude for their efforts and accomplishments.
3. Plans should be made for activities that encourage learning. Create opportunities for students to better themselves and practice new skills through the activities that you organize.
4. Encourage students to see failure as an opportunity to learn and grow. Instruct students to have the mindset that failure is a natural part of the learning process and a chance for personal development.
5. Encourage students to recognize the significance of learning throughout their entire lives by putting an emphasis on the significance of constant self-development.

Considering this, the following are some tips for encouraging a growth mentality in interns.

1. Make sure that the atmosphere is one that encourages learning. It is important to provide students with a secure setting in which they can explore and learn from their mistakes.
2. Encouragement and guidance should be provided. The students should be provided with consistent supervision and support, and their efforts and accomplishments should be praised.
3. Plans should be made for activities that encourage learning. Create opportunities for students to better themselves and practice new skills through the activities that you organize.
4. Teaching students to consider failure as an opportunity to grow and learn teaches students that failure is a natural part of the learning process and an opportunity for personal development.

3.2 Prototype Design

The second phase in the process of developing an online lesson is to establish the learning objectives, activities, and material delivery modalities that will be used. Learning Goals and Objectives To enable learners to comprehend the idea of a development mindset and to be able to apply it within the framework of cooperative education, the learning objectives will center on providing them with the necessary tools. An assortment of multimedia presentations, including videos, photos, and infographics, are utilized in the process of content creation to make the content more interesting and simpler to comprehend. Assessment is a component of Learning Activities Design, which comprises activities that place an emphasis on practice, problem solving, and cooperation. Examples of these activities include online classroom discussions and quizzes. Tests to measure comprehension of the Growth Mindset and the application of skills in cooperative education are examples of the types of assessments that, according to design, will be used to evaluate learning.

3.3. Development

The development process, the content that was produced will be transformed into an online class. Following is the procedure that will be followed to construct and evaluate the lesson itself: The development of instructional materials. To develop the

content that has been prepared, you should make use of various media production tools such as programs for video editing, programs for creating infographics, and programs for creating interactive media.

3.4 Implement

This step entails putting the online courses into practice, with a particular emphasis on managing and assisting learners so that they may access and utilize the lessons to their maximum potential. Preparation of the Instructional System: For facilitating learning and monitoring the outcomes of student learning, you should develop online platforms such as a Learning Management System (LMS). To assist learners in resolving challenges that may arise while they are learning, Learner Support offers both technical support and consulting.

3.5 Evaluation

At this very last stage, the success of the online class will be evaluated by three very knowledgeable individuals. Through the utilization of Innovation Quality Assessment, the content of the prototype online lesson on "Growth Mindset for Preparation in Cooperative Education" will be reviewed to enhance and develop online lessons to make it more effective. This evaluation will be determined by determining the IOC value.

Ethical approval for this research was obtained from Mae Fah Luang University’s Ethics Review Committee for research involving human subjects, based on Declaration of Helsinki, the Belmont report, CIOMS guidelines and the principle of the international conference on harmonization-Good clinical practice (ICH-GCP), which has approved the execution of the research project COE No.110/2024.

Chapter 4

Growth mindset to prepare for cooperative education courses

This chapter presents the development of a prototype online lesson titled "Growth Mindset for Preparation in Cooperative Education." The prototype was designed based on Dick and Carey's instructional design model, ensuring a structured and systematic approach to learning. The online lesson aims to enhance students' awareness of growth mindset principles and their application in professional environments.

4.1 Prototype development based on Dick and Carey's model

The development of the prototype followed the steps outlined in the Dick and Carey instructional design model:

4.1.1 Identify Instructional Goals The primary instructional goal was to help students develop a growth mindset to enhance their adaptability and learning during cooperative education experiences. This goal was established based on an analysis of student challenges in workplace settings.

4.1.2 Conduct Instructional Analysis An instructional analysis was conducted to determine the skills and knowledge required for students to successfully apply a growth mindset. Key elements included understanding the difference between fixed and growth mindsets, strategies for overcoming workplace challenges, and techniques for self-directed learning.

4.1.3 Analyze Learners and Contexts A learner analysis was conducted to assess students’ prior knowledge, learning preferences, and potential workplace challenges. The study revealed that students required additional support in problem-solving, resilience, and adaptability. The learning context was also examined to ensure that the online lesson could be accessed flexibly on multiple devices.

4.1.4 Write Performance Objectives Performance objectives were developed to align Defining and distinguishing between fixed and growth mindsets.

- Defining and distinguishing between fixed and growth mindsets.
- Applying growth mindset strategies in response to workplace challenges.
- Demonstrating resilience and adaptability in professional settings.

4.1.5 Develop Assessment Instruments Formative and summative assessments were designed to measure students' understanding and application of growth mindset principles. These included quizzes, reflective writing exercises, and scenario-based problem-solving tasks.

4.1.6 Develop Instructional Strategy The instructional strategy was designed to incorporate multimedia elements, interactive discussions, and self-reflection activities. The online lesson featured short videos explaining growth mindset principles, discussion forums for peer interaction, and case studies illustrating workplace challenges.

4.1.7 Develop and Select Instructional Materials The content was developed in the form of video lectures, infographics, interactive exercises, and digital reading materials. The materials were designed to be engaging and accessible for self-paced learning.

4.1.8 Design and Conduct Formative Evaluation A pilot study was conducted with a sample of cooperative education students. Their feedback was gathered through surveys and usability testing. Adjustments were made based on student responses, including simplifying instructional materials and increasing interactive elements.

4.1.9 Revised Instructional Materials Based on formative evaluation results, revisions were made to improve lesson clarity, engagement, and alignment with learning objectives.

4.2 Component of the prototype lesson

Creating a prototype lesson to promote Growth Mindset in practice training has important lesson components, namely lesson format, content, objectives, teaching methods, and stakeholders such as teachers, entrepreneurs, students as shown in Figure 3

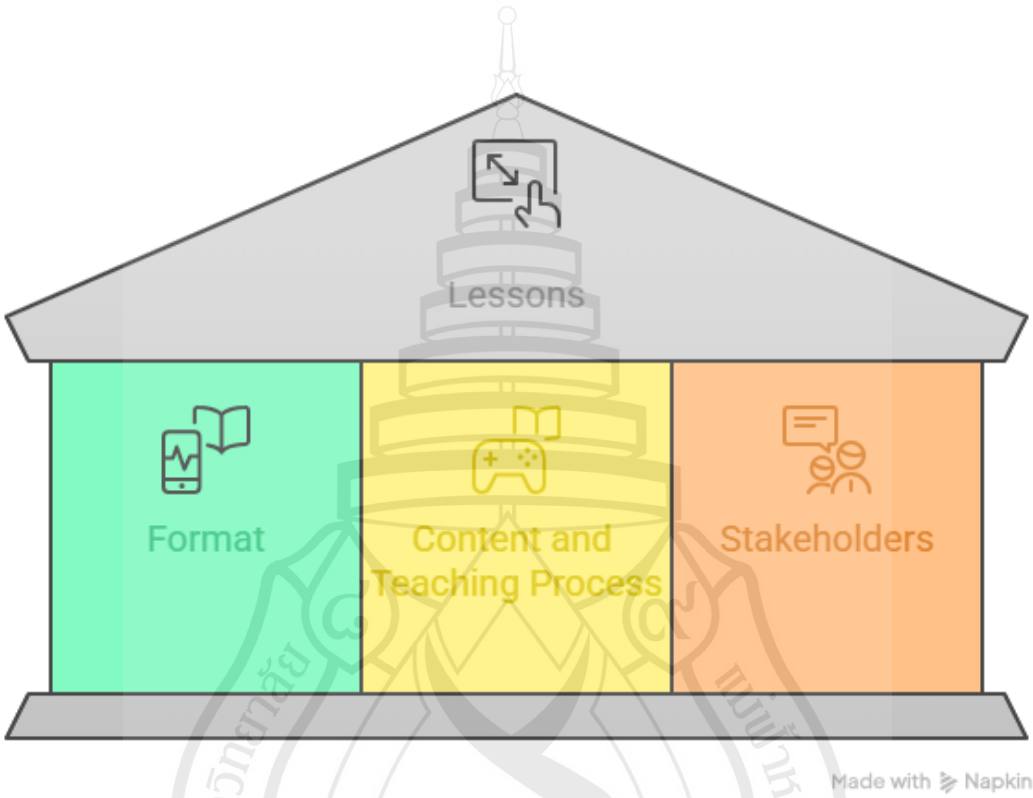

Figure 3 Components of the lesson.

The development of a prototype online lesson on Growth Mindset aims to make learners aware and understand the concept of Growth Mindset before entering the internship in the Cooperative Education System (CWIE). This prototype online lesson does not focus on developing in-depth work skills but is a tool for creating awareness and adjusting attitudes to be consistent with challenges that may arise during the internship. The characteristics of the prototype online lesson should consist of learning formats, namely online lessons consisting of Short videos, infographics to help learners understand the concept of Growth Mindset systematically. The main objective of the prototype online lesson is to create an understanding of Growth

Mindset and the difference between Fixed Mindset and Growth Mindset and encourage learners to have a positive attitude towards failure and obstacles in work.

The main purpose of this lesson is to create awareness of Growth Mindset in students' work practice. By helping students understand that a resilient attitude towards challenges can help them adapt and learn better from real experiences, although this lesson does not cover practical skills development, it can be a basic tool to help students be mentally prepared and have the right attitudes to face real situations in the workplace.

Design

The second step in designing online lessons is to define learning objectives, activities, and content presentation formats. Defining learning objectives (Learning Objectives) Content Design (Content Design) Content design will use a variety of multimedia presentations such as video, visual media, and infographics to make the content interesting and easy to understand. Designing learning activities (Learning Activities) with details as follows:

Awareness plan on Growth Mindset for Internship Students with Optional Activities The objectives of the prototype online lesson are to prepare English major students for the cooperative education course, namely, to make students aware of the importance of Growth Mindset in their internship and to encourage students to have self-confidence and dare to learn new things.

The main contents are as follows:

1. Understanding Growth Mindset
   1.1 Explains the meaning of Growth Mindset in simple language that is easy to understand.
   1.2 Compare with Fixed Mindset
   1.3 Give a clear example in everyday life.
2. The Importance of Growth Mindset in Internship
   2.1 Explain the benefits of a Growth Mindset in adapting to new work environments.

2.2 Help students learn from their mistakes and continuously develop themselves.

2.3 Help students to work effectively with others.

2.4 Help students achieve long-term career success.

Supplementary activities and teaching processes

1. Self-Assessment: Before beginning the activity, participants should complete an assessment to assess their level of belief in their Growth Mindset .
2. Short Videos: Present short videos that tell stories of people with a Growth Mindset and who have achieved success.

Teaching process

1. Connected to real life, presenting examples related to students' daily lives. To make students see the importance of Growth Mindset
2. Use technology. Use technology such as videos, slide presentations, or applications to increase interest and engagement in learning.

The purpose of this study is to demonstrate the components of the prototype online lesson that is titled "Growth Mindset for Preparation in Cooperative Education." As mentioned above, the prototype online lesson to prepare English major students for cooperative education courses aims to create awareness about Growth Mindset. This online lesson consists of 3 lessons as follows:

Table 4 *Lesson Plan for Online Lesson Prototype*

Lesson		**Objective of the lesson**	**Content**
1	Basic understanding of Growth Mindset	Explain the meaning and importance of Growth Mindset in the context of internships.	1. Compare the differences between Growth Mindset and Fixed Mindset in the workplace. The Meaning of Growth Mindset and Fixed Mindset in the Work Context 2. Examples of people who have been successful using a Growth Mindset in their careers

Lesson		Objective of the lesson	Content
			3. Video introducing Growth Mindset concept for interns
2	Developing a Growth Mindset in Internships	Explains how to practice Growth Mindset in the context of an internship.	1. Introduce techniques for goal setting and dealing with obstacles during internships. 2. Practice positive thinking skills and learning from mistakes at work. 3. Setting goals for internships and career development
3	Using Growth Mindset in the Workplace	Analyzing the importance of Growth Mindset in career development	Provides guidelines for dealing with problems and adapting in the workplace. Developing skills in working with others through Growth Mindset The importance of Growth Mindset in learning and career growth Case study of interns who developed a growth mindset for career advancement

Table 5 Storyboard of prototype

Section	Content	Format/Content Source
1	Analyze yourself by answering 10 questions.	Mindset Assessment
2	YouTube Related growth mindset	https://www.youtube.com/watch?v=75GFzikmRY0 **Before Watching** 1. What do you think the term "Growth Mindset" means?

Section	Content	Format/Content Source
		2. In what ways do you believe a person can improve their abilities or intelligence? **During Watching** 3. According to the video, how does the brain change when we learn new things? (At ~1:00 min) 4. What is the key difference between a Growth Mindset and a Fixed Mindset? (At ~2:30 min) **After Watching** 5. How can adopting a Growth Mindset help you during your internship or in your future career?
3	Share the experiences of the supervising teachers	3 course coordinators

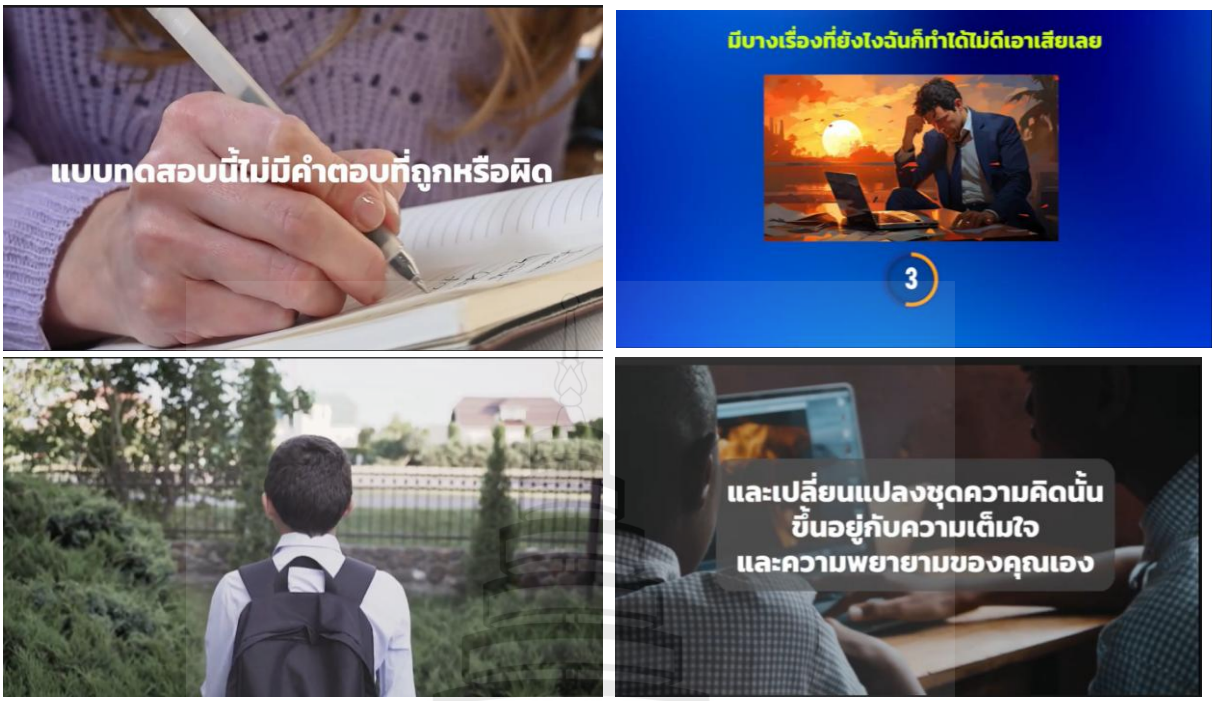

Figure 4 Examples from Lesson 1

Figure 5 Examples from Lesson 2

Figure 6 Example from Lesson 3

Chapter 5
Conclusion and Recommendations

The prototype online lesson, developed using Dick and Carey's instructional design model, effectively addressed the need for growth mindset training in cooperative education. The structured approach ensured a logical flow of content, well-defined learning objectives, and engaging instructional materials. Findings from formative and summative evaluations indicate that the online lesson positively impacted students' understanding of growth mindset principles and their application in real-world professional settings.

The study found that students who engaged with the online lesson demonstrated improved adaptability, problem-solving skills, and self-directed learning habits. These findings align with research in Chapter 2, which highlighted the importance of a growth mindset in educational and professional success (Dweck, 2006; Yeager & Dweck, 2012). Specifically, students with a growth mindset were more likely to view workplace challenges as learning opportunities rather than obstacles, a trait essential for success in cooperative education and long-term career development.

The prototype lesson on " Growth Mindset " for Cooperative Education course was developed to enhance the concepts and behaviors that are conducive to learning and working of intern students. The content of the lessons is designed to be appropriate for real situations in the workplace, so that students can develop themselves, adapt, and learn from work experiences effectively. The growth mindset framework, which emphasizes the ability to develop skills and intelligence through effort and commitment, plays an important role in the inclusive education and work training system. Students with a growth mindset view these experiences as opportunities for learning and self-development rather than self-assessment of their existing abilities. This will help students accept challenges, seek open-minded feedback, and persist even when they face obstacles in their work.

In a dynamic workplace or workplace, students' adaptability is essential. Students with a growth mindset are more open to new technologies, team structures, and new ways of working. They are more willing to experiment, learn from their mistakes, and improve their methods. Flexibility is also a key benefit, allowing students to handle difficult tasks and social challenges with a positive attitude. In addition, a growth mindset promotes goal-setting behaviors, as students focus on the learning process rather than the outcome alone. It promotes teamwork by encouraging collaboration, knowledge sharing, and openness to diverse perspectives. Self-confidence, or confidence in one's ability to succeed, is also fostered, leading to greater engagement and improved performance. Finally, teachers who foster a growth mindset help create a supportive learning environment that encourages continuous development and career growth.

From the results of the study, there are recommendations that can be used to develop future CWIE teaching and systems, including:

1. Improving and expanding online lessons Content related to real situations that students will face in their internship should be increased, and activities that help develop problem-solving skills should be added.
2. Integrating the Growth Mindset concept into the CWIE curriculum , the university can apply this concept to other curricula to enhance students' skills to better cope with problems and challenges in the workplace.
3. Extending research to the long term Long-term monitoring should be conducted to see how developing a Growth Mindset impacts students' future careers.

There are still some limitations that should be improved in further studies. The practical application of the research results can help universities develop teaching approaches that meet the needs of the labor market and better prepare students to face the challenges of the real working world.

Recommendations for future research

This study can be further developed in many aspects, such as:

1. Future Directions: As the fields of collaborative education and work-integrated education continue to develop, future research should focus on fostering growth mindsets in students across academic disciplines. A promising approach would be to conduct longitudinal studies to track the development of growth mindset traits in students over time, assessing how these traits relate to students' experiences in collaborative and integrative educational environments.

2. Blended Learning: Teaching model that combines online learning and practical learning, teaching development to effectively promote a growth mindset, educational stakeholders should adopt teaching strategies that support risk-taking and resilience in students. This includes allowing students to face challenges, emphasizing effort rather than natural intelligence, and creating an environment where mistakes are viewed as learning opportunities. For example, the Growth & Goals project may provide valuable insights into the effectiveness of different teaching methods in promoting a growth-focused approach.

3. Module development and evaluation: The design and assessment of learning modules should remain a top priority. Future work could improve the ADDIE model to ensure that modules are not only well-structured, but also adaptable to different learning management systems. This would allow instructors to better engage with students and promote the development of a growth mindset. Continuous feedback loops and qualitative data should be supplemented with quantitative assessments to improve the overall learning experience in the environment. By focusing on these future directions, institutions can better prepare English language majors for a successful transition into the workforce by fostering the mindset and skills necessary for thriving in an ever-changing environment.

5.1 Implications for Cooperative Education

Integrating growth mindset training into cooperative education enhances students' ability to adapt, solve problems, and continuously learn in professional

environments. Research in Chapter 2 demonstrated that work-integrated learning (WIL) programs significantly benefit from instructional strategies that promote resilience and self-improvement (Smith & Ragan, 1999). The structured instructional approach ensured that students received targeted support in these areas, making them more prepared for workplace challenges.

Furthermore, findings from research on Cooperative and Work-Integrated Education (CWIE) in Chapter 2 (Suranaree University of Technology, 2006; KMUTT) emphasized the role of real-world application in improving student employability. The online lesson supplemented theoretical learning with practical applications, reinforcing the connection between growth mindset principles and workplace expectations.

5.2 Recommendations for Future Research and Development

1. **Enhancing Learning Activities:** Future iterations of the online lesson should include more real-world scenarios, workplace simulations, and case studies to strengthen students' ability to apply growth mindset principles.
2. **Longitudinal Impact Study:** Conducting a long-term study on the impact of growth mindset training on students' career progression would provide deeper insights into its effectiveness. Research from Chapter 2 indicated that students with a growth mindset tend to achieve greater career success (Claro, Paunesku, & Dweck, 2016); thus, tracking students beyond their internships would add value to the study.
3. **Blended Learning Integration:** Combining online modules with in-person mentorship sessions can enhance learning outcomes. As indicated in Chapter 2, CWIE programs are most effective when theoretical learning is combined with real-world experiences (Boaler, 2013).
4. **Expansion Across Disciplines:** The growth mindset framework can be extended to other academic and professional fields to improve student preparedness. Research has shown that resilience and adaptability are crucial across all career paths, not just those in cooperative education (OECD, 2019).
5. **Cross-Cultural Studies:** Future research should explore how growth mindset interventions impact students in different cultural and institutional contexts. The

findings from the PISA 2019 test (OECD, 2019a) suggested that Thai students exhibit a more fixed mindset than their international counterparts, highlighting the need for localized approaches to fostering resilience and lifelong learning.

5.3 Conclusion

The development of the prototype online lesson using Dick and Carey's model demonstrated the effectiveness of a structured instructional design approach. The systematic development process ensured that students gained a clear understanding of growth mindset principles and their practical application in workplace settings. Findings from this study align with prior research on the benefits of growth mindset training, reinforcing its value in cooperative education programs. By fostering resilience, adaptability, and a positive approach to challenges, the online lesson has the potential to significantly improve students' internship experiences and future employability. The incorporation of formative assessments, interactive learning activities, and real-world applications made the lesson engaging and effective.

Future improvements, including blended learning approaches, expanded content, and longitudinal tracking, will further enhance the impact of this instructional intervention. As universities and employers continue to emphasize the importance of lifelong learning, integrating growth mindset principles into cooperative education programs will play a crucial role in preparing students for successful careers in an evolving global workforce.

Increasing students' understanding of the need to have a growth mindset in their work practice is the primary objective of this session. Although this lesson does not cover the development of practical skills, it can be a general tool to assist learners in becoming mentally prepared and having the appropriate attitudes to deal with real-life situations that may arise in the workplace. This is accomplished by assisting students in comprehending that having a resilient attitude toward challenges can assist them in adapting to new situations and learning more effectively from real-life experiences. The following recommendations can be incorporated into future CWIE training and systems based on the findings of the study:

1. Enhancing and broadening the scope of online classes the amount of content that is relevant to real-world scenarios that students would encounter during their internship should be enhanced, and exercises that assist in the development of problem-solving capability should be included.
2. Once the concept of a growth mindset has been incorporated into the curriculum of the CWIE, the university will be able to apply this concept to other curricula to improve students' abilities to deal with problems and obstacles that they may encounter in the workplace.
3. Extending the scope of research to the long term We ought to carry out long-term monitoring to determine the impact that cultivating a growth mindset has on the future careers of students.

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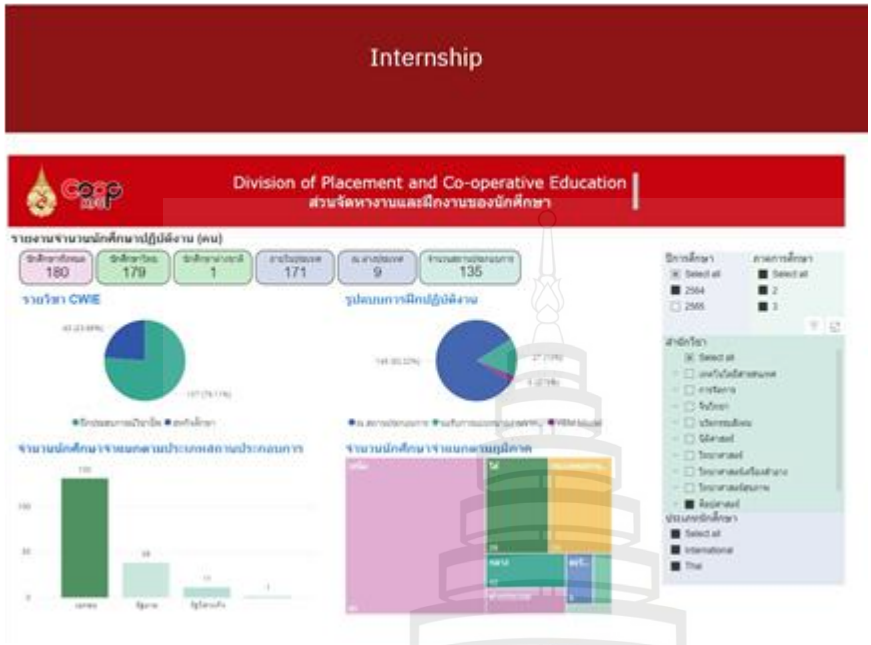
Appendix


Internship
Division of Placement and Co-operative Education
ส่วนจัดหางานและฝึกงานของนักศึกษา
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179
1
171
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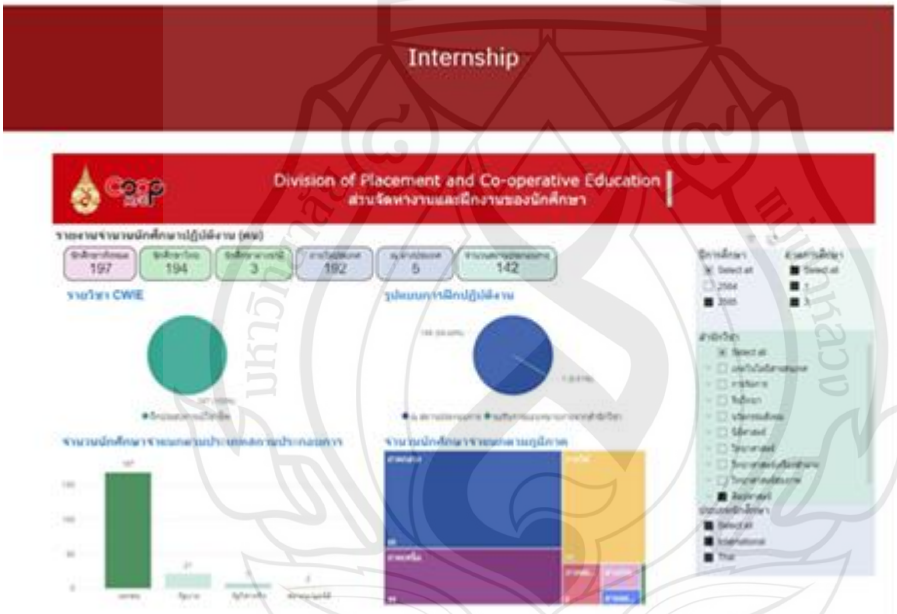
135


Internship
Division of Placement and Co-operative Education
ส่วนจัดหางานและฝึกงานของนักศึกษา
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142

แบบแสดงความคิดเห็นของผู้ทรงคุณวุฒิที่มีต่อนวัตกรรมบทเรียนออนไลน์ต้นแบบเพื่อเตรียมความพร้อมของนักศึกษาวิชาเอกภาษาอังกฤษในรายวิชาสหกิจศึกษา

คำชี้แจง ขอให้ท่านผู้เชี่ยวชาญได้กรุณาแสดงความคิดเห็นของท่านที่มีต่อบทเรียนออนไลน์ต้นแบบเพื่อเตรียมความพร้อมของนักศึกษาวิชาเอกภาษาอังกฤษในรายวิชาสหกิจศึกษา โดยใส่เครื่องหมาย (✓) ลงในช่องความคิดเห็นของท่านพร้อมเขียนข้อเสนอแนะที่เป็นประโยชน์ใน การนำไปพิจารณาปรับปรุงต่อไป

รายการขอความคิดเห็น	ความคิดเห็น			ข้อเสนอแนะ
	เหมาะสม 1	ไม่แน่ใจ 0	ไม่เหมาะสม -1	
1. ความสอดคล้องเหมาะสมกับหลักสูตร				
2. ความสอดคล้องเหมาะสมกับธรรมชาติวิชา				
3. ความสอดคล้องเหมาะสมกับวัยของผู้เรียน				
4. ความสอดคล้องเหมาะสมกับสภาพปัจจุบันและปัญหา				
5. ความเหมาะสมต่อกระบวนการพัฒนาผู้เรียน				
6. ความเหมาะสมของเนื้อหา				
7. ความเหมาะสมของขนาดตัวอักษร				
8. ความเหมาะสมของการใช้ภาษา				
9. ความเหมาะสมกับความสนใจของนักเรียน				
10.ความเหมาะสมของรูปแบบ				

ลงชื่อ.....

(.....)

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