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# A Systematic Review of Essential Transferable Skills in Higher Education in Thailand

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## Abstract

This systematic review investigates the essential transferable skills required for higher education students in Thailand to thrive in an increasingly dynamic global job market. Drawing upon 15 key sources, including academic literature, government reports, and industry insights from platforms, this study synthesizes critical perspectives on skill development. Using a synthesis matrix, nine essential transferable skills were identified: collaboration, problem-solving, critical thinking, lifelong learning, communication skills, creativity, digital literacy, adaptability, and emotional intelligence. These skills, prominently featured across multiple sources, reflect the demands of modern employers and the priorities for educational reform in Thailand. This review underscores the importance of embedding these skills in higher education curricula to better prepare students for future challenges. The findings contribute to ongoing discussions on educational development and workforce readiness in Thailand, offering practical insights for educators, policymakers, and industry stakeholders.

**Keywords:** Higher Education, Thailand, Transferrable Skills

## 1. Introduction

In the 21st century, transferable skills have become indispensable for individuals navigating an increasingly complex and rapidly evolving global job market. Transferable skills, which are versatile abilities applicable across various fields and professions, are now recognized as key determinants of employability and professional success. For higher education institutions, equipping students with these skills has become a priority to ensure graduates are adaptable, resilient, and prepared for future challenges. In Thailand, the demand for transferable skills is particularly pronounced as the nation strives to align its educational outcomes with the needs of a competitive workforce in the digital era. (Kaewrattanapat, N. 2023)

Transferable skills are work skills that can be applied or developed continuously (Department of Employment, 2024). No matter what career people have or when the career path has changed, transferable skills can still be applied to increase work efficiency. Transferable skills make individuals highly resilient and always in demand. In the past, it was often a necessary skill for executives and business owners. But now, technology makes it

easy for everyone to access knowledge sources, making transferable skills a necessity for anyone who wants to make themselves stand out.

Transferable skills have been recognized as a key factor in increasing employability, adaptability and flexibility in both work and personal life (World Economic Forum, 2023). These skills allow individuals with specialized knowledge to apply their skills to a variety of situations, promote long-term career growth and stability, and have immediate impact on their work, as well as long-term career and personal growth. As the work environment changes, having a strong foundation of transferable skills will help individuals remain relevant, resilient and successful in their careers.

Teaching cognitive transferable skills focuses on the importance of cognitive skills like problem-solving, emphasizing teaching principles, self-monitoring, and varied contexts to enhance skill transfer across disciplines (Billing, 2007).

Transferable skills needed in the workplace identifies key industry-required skills, including continuous learning, collaboration, communication, critical thinking, and creativity, based on surveys of industrial managers (Ana et al., 2020).

Competence and transferable skills highlight the challenges of applying transferable skills in varied contexts and recommend educational strategies to enhance skill relevance (Nägele & Stalder, 2017).

## 1.1 Research Objective

The purpose of this article is to provide a comprehensive understanding of these essential skills and their implications for higher education in Thailand. By analyzing existing literature and industry perspectives, this review seeks to offer actionable insights for educators, policymakers, and industry stakeholders. Ultimately, this study contributes to the ongoing dialogue on enhancing educational outcomes to meet the demands of Thailand's dynamic labor market.

## 1. Methods

This study systematically reviews key sources to identify the most critical transferable skills for higher education students in Thailand. We have tried to select data sources to cover the following stakeholders:

*Global framework:* World Economic Forum

*Labor organization:* Department of Employment (Thailand) and JobsDB.com

*Private sector:* Coursera

*Academic studies:* 11 publications

We synthesized the data to obtain the most mentioned key transferable skills using a synthetic matrix. The key skills are arranged according to the number of supporting sources. Batch information search through Google Scholar was then conducted to confirm the major and minor key skills.

## 2. Results

In this section, we present the results of a synthesis of the transferable skills mentioned in various sources.

## 1.1 Global framework

The top five transferable skills, according to the World Economic Forum (2020-2024) are:

*Communication and Collaboration:* The ability to clearly communicate ideas and work well with others is essential in all sectors. These skills help individuals adapt more easily to different organizational cultures and roles.

*Problem-Solving and Critical Thinking:* These skills help workers adapt to complex or unexpected situations, making them valuable in any work context. Analytical thinking enhances decision-making and enables individuals to meaningfully participate in an ever-changing environment.

*Digital Literacy:* As the digital economy expands, expertise in using digital tools and technologies becomes essential, including the ability to learn and adapt to new software and tools.

*Emotional Intelligence:* The ability to understand and manage one's own emotions, as well as empathize with others, is increasingly recognized as a key factor in personal success and leadership.

*Flexibility and Adaptability:* In a rapidly changing industry, the ability to adapt to new situations and roles is essential, especially when navigating economic crises, organizational restructuring, or transitioning to a new sector.

## 1.2 Labor organization

The top six transferable skills, according to the Department of Employment (2024) and JobsDB.com (2023) are:

*Creativity* or creative thinking skills can lead to smarter problem solving or even the creation of new innovations.

*Critical Thinking* or logical thinking skills help to analyze and prioritize.

*Problem-solving* skills support both immediate and expected problem solving, allowing people to deal with problems and control one's emotions.

*Teamwork* skills allow people to work well with others to enhance strengths and eliminate weaknesses for the team for the most efficient work.

*Digital Literacy* is about understanding and using digital technology, both in terms of devices such as computers, mobile phones, tablets, programs and various social media, being able to understand the work and use it to the greatest benefit in the work.

*Ability to learn new things* or skills in learning new things all the time, never stopping to learn, ready to accept new knowledge, new technologies, being attentive and always seeking knowledge.

## 1.3 Private sector

Coursera (2024) suggested six common transferable skills. In addition to critical thinking, problem solving, adaptability, and teamwork mentioned earlier, there are:

*Attention to detail* is the ability to ensure the quality of the delicate parts of a project or a product. A person who demonstrates meticulous attention to detail will be able to focus on the small but important parts that others may overlook.

*Management* is the ability to effectively deal with people and other processes, such as time or plans. Managers who are effective at managing other people may be skilled at supervising, directing, and scheduling. At the same time, they may also be skilled at understanding how each team member fits into the bigger picture of the organization.

## 1.4 Academic studies

In this section, we synthesize key transferable skills mentioned in several academic publications.

Kleckner & Butz (2022) and Sonnenschein & Ferguson (2020) mentioned that communication and collaboration skills play a very important role in professional work. This is because today's work emphasizes teamwork, information exchange, and coordination between people in the organization. Therefore, new graduates need to have good communication skills. However, research indicates that many graduates still lack sufficient communication skills to help them work effectively and work smoothly with others.

Succi & Canovi (2020) and Mahmood et al. (2023) mentioned that collaboration and problem-solving skills are highly valued by employers, as they promote creative work and help organizations deal with problems and obstacles effectively. Employers also see having a team with collaborative skills as a key factor in sustainably developing an organization towards its goals.

Anićić & Bušelić (2021) and Kumar et al. (2022) mentioned that critical thinking and creative thinking skills are skills that are being emphasized as important for graduates in an era of rapid change. The ability to analyze problems in depth, see opportunities, and develop new knowledge to deal with different situations are skills that employers expect from graduates and are skills that play a key role in graduates' adaptation to real work situations.

Jewell et al. (2020) mentioned that information or data management skills are important, especially in businesses that rely on data for decision-making. They are skills that are necessary to screen, store, and analyze data for operations. University-level teaching should include content on information skills to prepare graduates to be able to manage complex data and apply it in the work environment.

Gabelaia (2020) mentioned that emotional intelligence is another important skill that employers are looking for, especially in a dynamic work environment. Emotional intelligence enables graduates to understand and control their own and others' emotions, enabling them to work smoothly and effectively with others.

## 1.5 Key transferable skills

In this section, we synthesize key transferable skills across multiple sources using a synthesis matrix. According to Table 1, primary key transferable skills, sorted by the number of supporting sources, include Collaboration (CL), Problem-solving (PS), Critical Thinking (CT), Lifelong Learning (LL), Communication Skills (CM), and Creativity (CR).

Secondary key transferable skills include Digital Literacy (DL), Adaptability (AD), and Emotional Intelligence (EQ). Note that we use “Communication Skill” instead of “Communication” and “Adaptability” instead of “Flexibility” to avoid misinterpretation as two general terms are commonly used in scholar articles. Also, we use “Collaboration” instead of “Teamwork” and “Lifelong Learning” instead of “Continuous Learning”, as will be discussed in the next section.

*Table 1: Synthesis matrix*

Source	CM	CL	PS	CT	DL	EQ	AD	CR	LL
World Economic Forum (2023)	✓	✓	✓	✓	✓	✓	✓		
Department of Employment (2024)		✓	✓	✓	✓			✓	✓
JobsDB.com (2023)	✓	✓	✓	✓	✓			✓	✓

Source	CM	CL	PS	CT	DL	EQ	AD	CR	LL
Coursera (2024)		✓	✓	✓			✓		
Billing (2007)			✓	✓			✓		✓
Ana et al. (2020)	✓	✓		✓				✓	✓
Nägele & Stalder (2017)	✓	✓	✓						✓
Kleckner & Butz (2022)	✓	✓							
Sonnenschein & Ferguson (2020)	✓	✓							
Succi & Canovi (2020)		✓	✓						
Mahmood et al. (2023)		✓	✓						
Aničić & Bušelić (2021)				✓				✓	✓
Kumar et al. (2022)				✓				✓	✓
Jewell et al. (2020)					✓				
Gabelaia (2020)						✓			
<b>Total</b>	<b>6</b>	<b>10</b>	<b>8</b>	<b>8</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>5</b>	<b>7</b>

### 1.6 Batch information search

To check the reliability of the data synthesis, we conducted a Google Scholar search using the search terms shown in Table 2. The number of results was consistent with the grouping of primary and secondary skills in the previous section. We also found that “Collaboration”, “Lifelong Learning”, and “Digital Literacy” are more relevant than “Teamwork”, “Continuous Learning”, and “Information Skills”.

Table 2: Batch information search

Keywords	Number of results
“Transferable Skills” “Higher Education” “Collaboration”	26,600
“Transferable Skills” “Higher Education” “Teamwork”	16,800
“Transferable Skills” “Higher Education” “Problem-solving”	26,400
“Transferable Skills” “Higher Education” “Critical Thinking”	20,900
“Transferable Skills” “Higher Education” “Continuous Learning”	2,640
“Transferable Skills” “Higher Education” “Lifelong Learning”	15,600
“Transferable Skills” “Higher Education” “Communication Skills”	37,600
“Transferable Skills” “Higher Education” “Creativity”	20,300
“Transferable Skills” “Higher Education” “Digital Literacy”	2,990
“Transferable Skills” “Higher Education” “Information Skills”	1,380
“Transferable Skills” “Higher Education” “Adaptability”	9,400

### 3. Discussion

Our six primary transferable skills (collaboration, problem-solving, critical thinking, lifelong learning, communication skills, and creativity) are consistent with 21<sup>st</sup>-century skills mentioned in Untinagon (2021). Skillsbuilder.org (2024) also mentioned the consistent of the terms “Soft Skills”, “Transferable Skills”, “Employability Skills”, and “Essential skills”.

### 4. Conclusion

This study systematically reviews 15 key sources, including academic studies, industry reports, and online platforms, to identify the most critical transferable skills for higher education students in Thailand. Through a synthesis matrix, nine essential skills—collaboration, problem-solving, critical thinking, lifelong learning, communication skills, creativity, digital literacy, adaptability, and emotional intelligence—emerged as recurring priorities across the reviewed sources.

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