



Developing 21st Century Life Skills and Career Competencies Among University Students: A Case Study of Buddhist University in Thailand¹

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Abstract:

Background: The rapidly evolving 21st-century landscape demands that higher education institutions equip students with comprehensive life skills and career competencies extending beyond traditional academic knowledge. Buddhist universities in Thailand face distinctive challenges in integrating modern competency frameworks while preserving their philosophical foundations rooted in mindfulness, ethical conduct, and social responsibility.

Purpose: This research and development study aimed to assess current life skills and career competencies among students at Mahachulalongkornrajavidyalaya University (SBU), develop an evidence-based intervention framework (SBU-LCK Model), and evaluate its effectiveness in enhancing six critical competencies: emotional management, flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, and leadership and responsibility.

Methods: The study employed a four-phase research and development design incorporating needs assessment, model development, implementation trial, and effectiveness evaluation. Using stratified random sampling, 390 SBU students were selected for the needs assessment phase, with 100 students participating in the model implementation phase. Data collection utilized validated questionnaires assessing competency levels, semi-structured interviews with students and educators, and focus group discussions. Quantitative data were analyzed using descriptive statistics, Wilcoxon signed-rank tests, and Mann-Whitney U tests, while qualitative data underwent thematic analysis to identify curriculum gaps and implementation challenges.

Results: Pre-implementation assessment revealed moderately high baseline competencies ($M = 3.75$, $SD = 0.62$ on a 5-point Likert scale), with notable gaps in flexibility and adaptability ($M = 3.60$), social and cross-cultural skills ($M = 3.55$), and leadership and responsibility ($M = 3.65$). Post-implementation results demonstrated statistically significant improvements across all six competencies ($p < 0.001$): emotional management increased from $M = 4.00$ to $M = 4.35$, flexibility from $M = 3.60$ to $M = 4.10$, initiative from $M = 3.70$ to $M = 4.20$, social skills from $M = 3.55$ to $M = 4.05$, productivity from $M = 3.80$ to $M = 4.25$, and leadership from $M = 3.65$ to $M = 4.15$. Students reported high satisfaction with the experiential

¹ Received: 22 August 2024; Revised: 26 January 2025; Accepted 31 January 2025



learning opportunities, hands-on activities, and real-world skill development integrated throughout the model. Educators noted the model's effectiveness in addressing previously underemphasized competencies and its flexibility for integration across diverse academic programs.

Conclusions: The SBU-LCK Model effectively enhanced 21st-century life skills and career competencies among Buddhist university students in Thailand. The integration of Buddhist philosophical principles—including mindfulness, ethical conduct, and social responsibility—with experiential learning methodologies, self-directed projects, and collaborative exercises created a culturally responsive framework applicable to similar educational contexts. Findings indicate that competency-based interventions incorporating structured workshops, problem-solving simulations, intercultural exchanges, and leadership development activities significantly improve student readiness for modern workforce demands while honoring traditional Buddhist educational values.

Keywords: 21st century skills, life skills development, career competencies, Buddhist higher education, Thailand, research and development, SBU-LCK Model, experiential learning, competency-based education

1. INTRODUCTION

In the rapidly evolving landscape of the 21st century, the demands on educational systems have shifted significantly from those of the previous century. The focus has moved from merely imparting academic knowledge to developing a broader set of life skills and competencies that are essential for navigating the complexities of modern life and the global workforce. These competencies encompass the ability to manage emotions, adapt to changing circumstances, take initiative, engage effectively in social interactions, and demonstrate leadership and responsibility. As such, educational institutions, particularly universities, play a critical role in equipping students with these skills to ensure their success in a dynamic and interconnected world (Greenstein, 2012; Trilling & Fadel, 2009).

The studied Buddhist University (SBU), a leading institution in Thailand, recognizes the necessity of integrating 21st century skills into its curriculum to prepare its students for both professional and personal challenges. Historically, the university has focused on blending academic education with the principles of Buddhist philosophy, aiming to produce graduates who are not only knowledgeable but also morally grounded and socially responsible. However, the increasing complexity of the global job market and societal demands has prompted the need to reassess and enhance the university's approach to life skills and career development (Srikosamatara, 2014; Phra Dhammasinghapuracariya, 2015).

The concept of life skills has evolved significantly over the past few decades. In the 20th century, education primarily emphasized core academic subjects and the evaluation of knowledge acquisition. However, the emergence of new technologies and the fast-paced nature of societal changes have led to the recognition that students require a diverse set of skills to thrive. These skills extend beyond cognitive and technical abilities to include emotional intelligence, adaptability, and the ability to work collaboratively across cultural boundaries (Goleman, 1995; Heckman & Kautz, 2012). The World Health Organization



(WHO) and UNICEF have long emphasized the importance of life skills, defining them as critical for effective communication, problem-solving, emotional management, and adaptability in daily life (World Health Organization, 1997; UNICEF, 2012).

In response to these developments, SBU has undertaken a comprehensive study to assess the current state of life skills and career competencies among its students and to develop a model that addresses the identified gaps. This initiative aligns with global educational trends that prioritize the development of competencies such as critical thinking, creativity, collaboration, and communication - often referred to as the "4Cs" - as essential components of a modern education (National Education Association, 2012; Binkley et al., 2012). The study, known as the SBU-LCK Model, seeks to provide a structured approach to enhancing six critical competencies: emotional management, flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, and leadership and responsibility (Lombardi, 2007; Fullan, 2013).

These competencies were selected based on their relevance to the challenges of the 21st century and their alignment with the university's mission to foster well-rounded, capable graduates. Emotional management, for example, is increasingly recognized as a key factor in academic and professional success, as it underpins the ability to navigate stress, build resilience, and maintain focus in high-pressure environments (Salovey & Mayer, 1990; Petrides et al., 2004). Similarly, flexibility and adaptability are crucial in a world where change is constant, requiring individuals to continuously update their skills and knowledge to remain competitive (Voogt & Roblin, 2012). Initiative and self-direction empower students to take ownership of their learning and career paths, fostering a proactive attitude that is essential for lifelong learning (Pintrich, 2004; Zimmerman, 2002).

Social and cross-cultural skills are equally important in today's globalized society, where collaboration often involves working with diverse teams across different cultures and backgrounds. These skills help students develop the empathy and communication abilities needed to navigate complex interpersonal dynamics (Deardorff, 2006; Fantini, 2009). Productivity and accountability are fundamental to achieving personal and professional goals, as they involve managing time and resources effectively, setting priorities, and taking responsibility for one's actions (Covey, 1989; Pink, 2009). Finally, leadership and responsibility are essential for guiding teams, making decisions, and driving positive change in both organizational and community settings (Northouse, 2018; Kouzes & Posner, 2007).

The present study was conducted with the following objectives: to investigate the current level of life skills and career competencies among students, to develop a model tailored to their needs, to trial the model in a controlled setting, and to evaluate its effectiveness in enhancing these skills. The findings from this study are expected to contribute significantly to the field of education, offering insights into how universities can better prepare their students for the demands of the modern world. Moreover, the SBU-LCK Model provides a replicable framework that other institutions can adapt to enhance their own life skills and career development programs (Dede, 2010; Darling-Hammond et al., 2020).

In conclusion, the integration of life skills and career competencies into higher education is not merely a response to the changing demands of the job market but a necessary evolution in education itself. By equipping students with the tools they need to navigate the



complexities of modern life, universities like SBU are not only preparing them for successful careers but also for meaningful, ethical participation in society. This study provides a crucial step in understanding and implementing these changes within the context of higher education in Thailand, with implications for educational practices worldwide.

2. LITERATURE REVIEW

The literature review explores the theoretical and empirical foundations of life skills and career competencies in the context of higher education. This section examines the evolution of these concepts, their relevance in the 21st century, and the various models and frameworks that have been proposed to integrate them into educational practices. The review also highlights the specific challenges and opportunities faced by universities, particularly those in Thailand, in implementing these competencies within their curricula.

2.1 Evolution of Life Skills and Career Competencies: The concept of life skills has evolved significantly over the past few decades, shifting from a focus on basic survival skills to a broader understanding that includes emotional, cognitive, and social competencies. Initially, life skills were defined by organizations like the World Health Organization (WHO) as the abilities necessary for adaptive and positive behavior, enabling individuals to deal effectively with the demands and challenges of everyday life (World Health Organization, 1997). This definition was later expanded to include skills such as communication, decision-making, problem-solving, and critical thinking, which are essential for personal and professional success (UNICEF, 2012). In parallel, the concept of career competencies has gained prominence, particularly in response to the changing demands of the global job market. Career competencies refer to the skills, knowledge, and attitudes that individuals need to manage their careers effectively, including the ability to adapt to changing circumstances, set and achieve career goals, and continuously update one's skills (Heckman & Kautz, 2012; Van der Heijden et al., 2009). These competencies are increasingly recognized as critical for success in the 21st century, where traditional career paths are becoming less common, and individuals are required to navigate more complex and dynamic work environments (DeFillippi & Arthur, 1994). The integration of life skills and career competencies into educational curricula has been driven by the recognition that traditional academic knowledge alone is insufficient to prepare students for the challenges of modern life and work. Educational theorists such as John Dewey have long advocated for an experiential approach to learning, where students are actively engaged in real-world problem-solving and critical thinking (Dewey, 1938). This approach aligns with the current emphasis on developing holistic competencies that encompass cognitive, emotional, and social dimensions (Lombardi, 2007; Greenstein, 2012).

2.2 Relevance of 21st-Century Skills in Higher Education: The relevance of 21st-century skills in higher education has been widely acknowledged by educators, policymakers, and industry leaders. The shift towards a knowledge-based economy has increased the demand for skills that enable individuals to think critically, solve complex problems, and collaborate effectively in diverse teams (Trilling & Fadel, 2009; Dede, 2010). In response, various frameworks have been developed to guide the integration of these skills into educational practices. The "Four Cs" framework, for example, emphasizes the importance of critical



thinking, communication, collaboration, and creativity as essential components of a modern education (National Education Association, 2012). In addition to the "Four Cs," other frameworks have highlighted the importance of emotional intelligence, adaptability, and leadership in preparing students for the demands of the 21st century (Goleman, 1995; Fullan, 2013). Emotional intelligence, in particular, has been shown to play a crucial role in academic and professional success, as it underpins the ability to manage stress, build resilience, and navigate interpersonal relationships (Petrides et al., 2004; Salovey & Mayer, 1990). Similarly, adaptability and leadership are essential for thriving in environments characterized by rapid change and uncertainty, where individuals must continuously learn and take on new roles and responsibilities (Voogt & Roblin, 2012; Northouse, 2018). The integration of 21st-century skills into higher education is not without challenges. Universities often face institutional barriers, such as rigid curricula, limited resources, and a focus on traditional academic outcomes, that can hinder the adoption of new teaching methods and assessment strategies (Darling-Hammond et al., 2020; Lombardi, 2007). Moreover, there is often a gap between the skills taught in universities and those required by employers, leading to concerns about the employability of graduates (Binkley et al., 2012). Addressing these challenges requires a concerted effort from educators, administrators, and policymakers to create learning environments that foster the development of life skills and career competencies.

2.3 Models and Frameworks for Developing Life Skills and Career Competencies: Several models and frameworks have been proposed to guide the development of life skills and career competencies in educational settings. One such model is the "21st Century Skills Framework" developed by the Partnership for 21st Century Skills (P21), which emphasizes the integration of core academic subjects with interdisciplinary themes, such as global awareness, financial literacy, and civic engagement (P21, 2007). The framework also highlights the importance of developing learning and innovation skills, information and media literacy, and life and career skills. Another influential model is the "Learning by Doing" approach, which emphasizes experiential learning as a means of developing critical skills and competencies (Kolb, 1984). This approach is based on the idea that students learn best when they are actively engaged in hands-on activities that require them to apply their knowledge in real-world contexts. The "Learning by Doing" model has been widely adopted in higher education, particularly in professional programs such as business, engineering, and the health sciences (Lombardi, 2007). The "Self-Directed Learning" model is another important framework for developing life skills and career competencies. This model encourages students to take responsibility for their own learning by setting goals, seeking out resources, and reflecting on their progress (Zimmerman, 2002; Pintrich, 2004). Self-directed learning is particularly relevant in the context of lifelong learning, as it equips students with the skills and attitudes needed to continue learning and adapting throughout their careers. The "Emotional Intelligence" model, popularized by Daniel Goleman, focuses on the development of emotional and social competencies that are critical for success in both personal and professional life (Goleman, 1995). This model includes five key components: self-awareness, self-regulation, motivation, empathy, and social skills. Emotional intelligence has been shown to be a strong predictor of academic performance, job satisfaction, and leadership effectiveness (Petrides et al., 2004; Salovey & Mayer, 1990).



2.4 Challenges and Opportunities in Implementing Life Skills and Career Competencies: Implementing life skills and career competencies in higher education presents both challenges and opportunities. One of the main challenges is the need for a paradigm shift in how education is delivered and assessed. Traditional models of education, which focus on rote learning and standardized testing, are often inadequate for developing the complex skills and competencies required in the 21st century (Darling-Hammond et al., 2020). To address this challenge, universities need to adopt more flexible and innovative teaching methods that prioritize active learning, collaboration, and critical thinking. Another challenge is the need for faculty development and support. Many educators are not adequately trained to teach life skills and career competencies, and may lack the resources and support needed to implement these skills effectively in their classrooms (Fullan, 2013). Providing professional development opportunities for faculty, as well as creating a culture of continuous learning and improvement, is essential for the successful integration of these skills into higher education (Trilling & Fadel, 2009). Despite these challenges, there are also significant opportunities for universities to enhance their curricula and better prepare students for the demands of the modern world. The increasing availability of digital tools and resources, for example, provides new opportunities for experiential learning and collaboration (Dede, 2010). Additionally, the growing emphasis on interdisciplinary education offers a chance to integrate life skills and career competencies into a wide range of academic programs, from the humanities to the sciences (Voogt & Roblin, 2012).

2.5 Life Skills and Career Competencies in the Thai Context: In Thailand, the integration of life skills and career competencies into higher education has gained increasing attention in recent years. The Thai education system has traditionally emphasized rote learning and memorization, with a strong focus on academic achievement and examination performance (Srikosamatara, 2014). However, there is growing recognition of the need to shift towards a more holistic approach to education that prioritizes the development of critical thinking, creativity, and social skills.

The SBU has been at the forefront of this shift, recognizing the importance of integrating life skills and career competencies into its curriculum. As a Buddhist university, SBU has a unique opportunity to blend traditional academic education with the principles of Buddhist philosophy, which emphasize ethical conduct, mindfulness, and social responsibility (Phra Dhammasinghapuracariya, 2015). This approach aligns with the broader goals of 21st-century education, which seeks to develop not only knowledgeable graduates but also individuals who are capable of contributing positively to society. The SBU-LCK Model, developed as part of this study, represents a significant step forward in this effort. By focusing on six key competencies - emotional management, flexibility, initiative, social skills, productivity, and leadership - the model provides a structured approach to developing the skills and attitudes needed for success in the 21st century. The model also reflects the unique cultural and educational context of Thailand, integrating Buddhist principles with modern educational practices to create a holistic approach to life skills and career development.



3. RESEARCH QUESTIONS

This study is guided by the following research questions, which aim to explore the development and implementation of life skills and career competencies among students at SBU:

3.1 What is the current state of life skills and career competencies among students at SBU?

3.2 What are the specific needs and gaps in the current curriculum at SBU in terms of developing 21st-century life skills and career competencies?

3.3 How can the SBU-LCK Model be developed and implemented to effectively enhance life skills and career competencies among students?

3.4 What is the impact of the SBU-LCK Model on students' life skills and career competencies after its implementation?

3.5 How do students and educators perceive the effectiveness and relevance of the SBU-LCK Model in enhancing 21st-century skills at SBU?

4. OBJECTIVES

The objectives of this study are designed to address the research questions and provide a comprehensive understanding of the development and implementation of life skills and career competencies among students at SBU. The specific objectives are as follows:

4.1 To assess the current state of life skills and career competencies among students at SBU.

4.2 To identify specific needs and gaps in the current SBU curriculum regarding the development of 21st-century life skills and career competencies.

4.3 To develop and implement the SBU-LCK Model to enhance life skills and career competencies among students at SBU.

4.4 To evaluate the impact of the SBU-LCK Model on students' life skills and career competencies after its implementation.

4.5 To explore students' and educators' perceptions of the effectiveness and relevance of the SBU-LCK Model in enhancing 21st-century skills at Mahachulalongkornrajavidyalaya University.

5. RESEARCH METHODOLOGY

This study employs a research and development (R&D) approach to explore, develop, and evaluate the SBU-LCK Model, which is designed to enhance life skills and career competencies among students at SBU. The methodology is structured in four phases: assessing the current state and needs, developing the model, implementing the model in a trial phase, and evaluating its effectiveness.

5.1 Research Design: The research design is divided into four phases, each focusing on a specific aspect of the study: Phase 1: Needs Assessment: This phase involves assessing the current state of life skills and career competencies among SBU students and identifying specific needs and gaps in the existing curriculum. Quantitative data will be collected through



surveys, while qualitative data will be gathered from focus groups and interviews with students and educators; Phase 2: Model Development: Based on the findings from the needs assessment, the SBU-LCK Model will be developed. This model will focus on enhancing six key competencies: emotional management, flexibility, initiative, social skills, productivity, and leadership. The development process will involve collaboration with educational experts, curriculum developers, and SBU faculty to ensure the model's relevance and practicality. Phase 3: Implementation and Trial: The SBU-LCK Model will be implemented in a selected group of SBU students as a pilot project. This phase will involve integrating the model into the existing curriculum and conducting workshops, activities, and learning modules designed to enhance the targeted competencies. Phase 4: Evaluation: The effectiveness of the SBU-LCK Model will be evaluated by comparing pre- and post-implementation outcomes. Quantitative data will be collected through standardized assessments and surveys, while qualitative data will be obtained from interviews and focus groups. The evaluation will focus on the impact of the model on students' life skills and career competencies, as well as their overall satisfaction and feedback.

5.2 Population and Sample: (1) Population: The study population includes all undergraduate students at Mahachulalongkornrajavidyalaya University, estimated to be around 3,000 students. (2) Sample: A stratified random sampling method will be used to select a representative sample of 390 students for the needs assessment phase. For the trial phase, a purposive sample of 100 students will be selected to participate in the implementation of the SBU-LCK Model. This sample will be diverse, including students from different faculties, academic years, and demographic backgrounds to ensure comprehensive results.

5.3 Data Collection Methods: (1) Quantitative Data Collection: Surveys and Assessments: Structured questionnaires will be used to assess the current state of life skills and career competencies among students. These surveys will include Likert-scale items designed to measure students' proficiency in the six targeted competencies. Pre- and post-implementation surveys will be administered to evaluate the impact of the SBU-LCK Model; (2) Qualitative Data Collection: Focus Groups and Interviews: Focus groups and semi-structured interviews will be conducted with students and educators to gain deeper insights into their perceptions of the current curriculum, the identified needs, and the effectiveness of the SBU-LCK Model. These qualitative methods will also explore the challenges and opportunities associated with implementing the model.

5.4 Data Analysis: (1) Quantitative Data Analysis: The quantitative data from surveys and assessments will be analyzed using descriptive statistics (means, standard deviations, and frequency distributions) to summarize the current state of life skills and career competencies. Inferential statistics, including the Wilcoxon signed-rank test and the Mann-Whitney U test, will be used to compare pre- and post-implementation outcomes and to assess the significance of the differences observed. (2) Qualitative Data Analysis: Qualitative data from focus groups and interviews will be analyzed using thematic analysis. This process involves coding the data to identify key themes and patterns related to the needs, gaps, and effectiveness of the SBU-LCK Model. Thematic analysis will help to contextualize the quantitative findings and provide a more nuanced understanding of students' and educators' experiences.



5.5 Ethical Considerations: Ethical considerations are central to this study. Informed consent will be obtained from all participants, who will be informed of the study's purpose, procedures, and their right to withdraw at any time without penalty. Anonymity and confidentiality will be maintained throughout the study, with data being securely stored and accessible only to the research team. The study will adhere to the ethical guidelines of Mahachulalongkornrajavidyalaya University and the broader educational research community.

This research methodology provides a systematic approach to exploring, developing, and evaluating the SBU-LCK Model for enhancing life skills and career competencies among students at Mahachulalongkornrajavidyalaya University. By combining quantitative and qualitative methods, the study aims to provide robust and comprehensive insights that can inform the design and implementation of similar programs in other educational institutions.

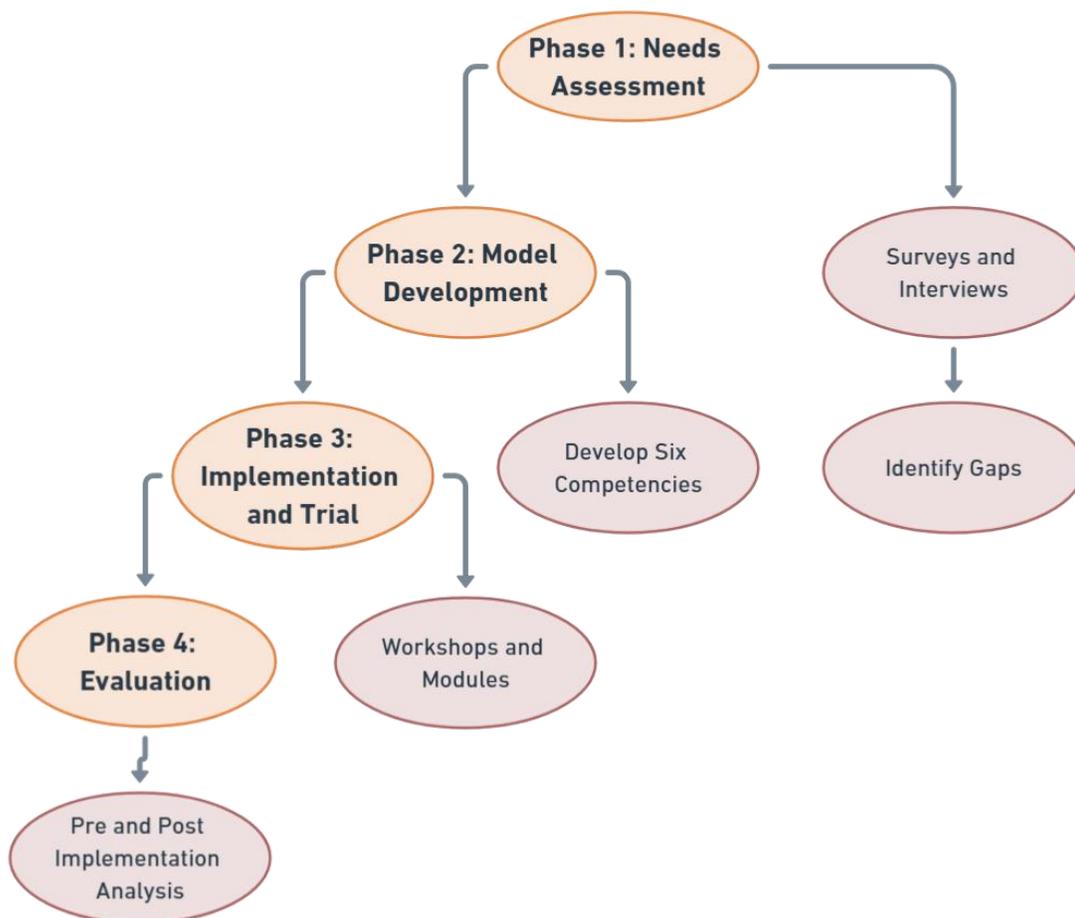


Figure 1: SBU-LCK Model Development Process



6. FINDINGS

The findings of this study provide a comprehensive analysis of the current state of life skills and career competencies among students at Mahachulalongkornrajavidyalaya University (SBU), the identified needs and gaps in the existing curriculum, the development and implementation of the SBU-LCK Model, and the evaluation of its effectiveness. The results are presented in alignment with the study's objectives, focusing on the assessment of existing competencies, the impact of the SBU-LCK Model on these competencies, and the perceptions of students and educators regarding the model's effectiveness.

6.1 Current State of Life Skills and Career Competencies: The assessment phase revealed that the overall level of life skills and career competencies among SBU students was moderately high, with some variation across the six targeted competencies. The average score for students' competencies was 3.75 on a 5-point Likert scale, indicating that while students possess a reasonable level of these skills, there is significant room for improvement, particularly in certain areas. **Emotional Management:** This competency scored the highest, with an average of 4.00. Students generally reported good ability to manage their emotions, cope with stress, and maintain focus in challenging situations. However, some students indicated difficulty in applying these skills consistently across different contexts, particularly in high-pressure academic settings. **Flexibility and Adaptability:** This competency had an average score of 3.60, suggesting that while students are somewhat capable of adapting to changes and new situations, they often struggle with uncertainty and require additional support in developing resilience and flexibility in their approach to problem-solving. **Initiative and Self-Direction:** The average score for this competency was 3.70, reflecting a moderate level of initiative among students. Many students demonstrated the ability to take charge of their learning and career planning, but a significant portion of the sample reported a lack of confidence in setting and pursuing long-term goals. **Social and Cross-Cultural Skills:** This competency was rated at 3.55, indicating a need for improvement in students' ability to communicate effectively and work collaboratively with peers from diverse backgrounds. While some students excelled in group work and intercultural communication, others found it challenging to navigate social dynamics in a multicultural environment. **Productivity and Accountability:** Students scored an average of 3.80 in this competency, suggesting that they generally manage their time and responsibilities well. However, there was variability in how students prioritized tasks and maintained accountability for their actions, with some requiring further development in time management and self-regulation. **Leadership and Responsibility:** This competency received a score of 3.65, indicating that while students exhibit some leadership qualities, such as decision-making and team coordination, they often lack the confidence to take on leadership roles and to fully embrace responsibility in both academic and extracurricular activities.

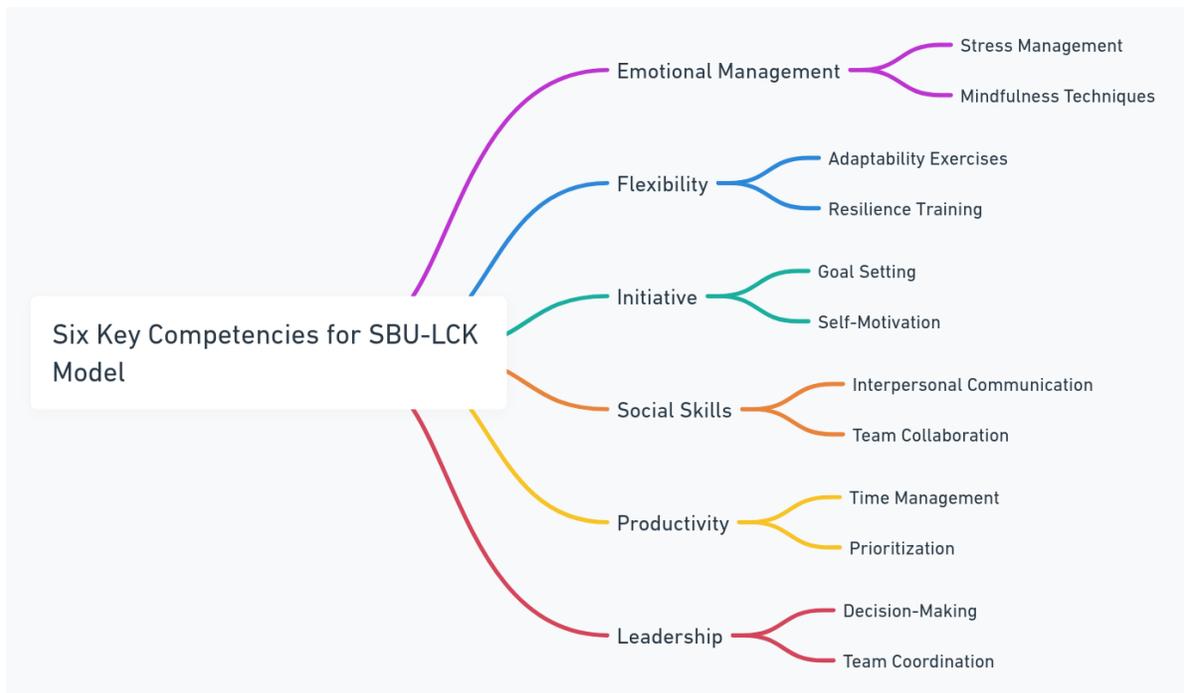


Figure 2: Six Key Competencies of SBU-LCK

6.2 Identified Needs and Gaps in the Curriculum: The needs assessment identified several gaps in the current SBU curriculum that limit the development of 21st-century life skills and career competencies. While the curriculum provides a strong foundation in academic knowledge and Buddhist principles, it lacks structured opportunities for students to develop the practical skills necessary for navigating complex life and career challenges.

Key Gaps Identified: (1) Lack of Experiential Learning Opportunities: Students reported limited access to hands-on, experiential learning activities that allow them to apply theoretical knowledge in real-world contexts. This gap hinders the development of critical thinking, problem-solving, and adaptability. (2) Insufficient Focus on Social and Cross-Cultural Skills: The curriculum does not adequately address the importance of social and cross-cultural competencies, which are increasingly important in a globalized world. Students expressed a need for more opportunities to engage in collaborative projects and intercultural exchanges. (3) Limited Support for Initiative and Self-Direction: While the curriculum encourages academic achievement, it does not provide sufficient guidance for students to take initiative in their personal and career development. Students indicated a desire for more resources and mentoring to help them set and achieve long-term goals. (4) Need for Enhanced Leadership Training: Leadership skills are underemphasized in the current curriculum, with few structured programs or activities that foster leadership development. Students suggested that more leadership workshops and opportunities to take on leadership roles in student organizations would be beneficial.

6.3 Development and Implementation of the SBU-LCK Model: Based on the needs assessment, the SBU-LCK Model was developed to address the identified gaps and enhance



students' life skills and career competencies. The model focuses on six key competencies: emotional management, flexibility, initiative, social skills, productivity, and leadership. The development process involved collaboration with faculty, educational experts, and curriculum developers to ensure the model's relevance and practicality. The SBU-LCK Model was implemented as a pilot project with a selected group of 100 students. The model included a series of workshops, activities, and learning modules designed to enhance the targeted competencies. These activities were integrated into the existing curriculum, with a focus on experiential learning, self-directed projects, and collaborative exercises.

Implementation Highlights: (1) **Emotional Management Workshops:** These workshops focused on mindfulness, stress management, and emotional intelligence, helping students develop the skills needed to manage their emotions effectively in both academic and personal contexts. (2) **Flexibility and Adaptability Activities:** Students participated in problem-solving exercises and simulations that required them to adapt to changing scenarios and develop resilience in the face of uncertainty. (3) **Initiative and Self-Direction Modules:** These modules provided students with tools and strategies for goal-setting, time management, and self-motivation, encouraging them to take ownership of their learning and career planning. (4) **Social and Cross-Cultural Skills Projects:** Collaborative projects and intercultural exchanges were introduced to help students develop effective communication skills and the ability to work in diverse teams. (5) **Productivity and Accountability Exercises:** Students engaged in activities that emphasized time management, prioritization, and accountability, helping them develop habits of productivity and self-regulation. (6) **Leadership Development Workshops:** These workshops focused on decision-making, team coordination, and ethical leadership, providing students with opportunities to practice and refine their leadership skills.

6.4 Evaluation of the SBU-LCK Model: The effectiveness of the SBU-LCK Model was evaluated by comparing pre- and post-implementation outcomes, using both quantitative and qualitative data. The findings indicate significant improvements in students' life skills and career competencies across all six targeted areas. (1) **Quantitative Results:** **Emotional Management:** The average score increased from 4.00 to 4.35, indicating that students gained greater control over their emotions and developed stronger coping mechanisms for stress. **Flexibility and Adaptability:** The score improved from 3.60 to 4.10, reflecting enhanced resilience and adaptability in problem-solving and new situations. **Initiative and Self-Direction:** The score rose from 3.70 to 4.20, showing that students became more proactive in setting goals and managing their personal and academic responsibilities. **Social and Cross-Cultural Skills:** The score increased from 3.55 to 4.05, suggesting improved communication skills and a greater ability to collaborate with peers from diverse backgrounds. **Productivity and Accountability:** The score increased from 3.80 to 4.25, indicating better time management, prioritization, and accountability. **Leadership and Responsibility:** The score improved from 3.65 to 4.15, showing that students developed stronger leadership abilities and a greater willingness to take on responsibility. **Qualitative Feedback:** (1) **Student Perceptions:** Students reported high levels of satisfaction with the SBU-LCK Model, particularly appreciating the hands-on, experiential learning opportunities and the focus on real-world skills. Many students expressed increased confidence in their abilities to manage their emotions, take initiative, and lead teams. (2) **Educator Feedback:** Educators noted that the



SBU-LCK Model effectively addressed the gaps in the current curriculum and provided students with valuable skills that were previously underemphasized. They also highlighted the model's flexibility and potential for integration into various academic programs.

Summary of key findings are as follows: **Moderately High Competencies:** The current level of life skills and career competencies among SBU students is moderately high, with significant room for improvement in areas such as social skills, flexibility, and leadership. **Curriculum Gaps:** The needs assessment identified key gaps in the SBU curriculum, including a lack of experiential learning opportunities, insufficient focus on social and cross-cultural skills, limited support for initiative and self-direction, and underemphasized leadership training. **Effective Model Development:** The SBU-LCK Model was successfully developed and implemented, focusing on enhancing emotional management, flexibility, initiative, social skills, productivity, and leadership. **Significant Improvements:** The implementation of the SBU-LCK Model resulted in significant improvements in all six targeted competencies, as evidenced by both quantitative assessments and qualitative feedback from students and educators. These findings provide valuable insights into how universities can better prepare students for the demands of the 21st century by integrating life skills and career competencies into their curricula. The success of the SBU-LCK Model suggests that similar approaches could be adapted and implemented in other educational institutions to enhance student outcomes and overall readiness for the challenges of modern life and work.

7. DISCUSSION

The findings of this study offer important insights into the current state of life skills and career competencies among students at SBU and the effectiveness of the SBU-LCK Model in enhancing these competencies. This discussion section interprets these findings in the context of existing literature, explores their implications for educational practice, and addresses potential challenges and limitations of the study.

7.1 Interpretation of Findings: The study revealed that the overall level of life skills and career competencies among SBU students was moderately high, with specific strengths in emotional management but notable gaps in flexibility, social skills, and leadership. These results are consistent with previous research indicating that while students often possess basic competencies, there are significant areas for growth, particularly in skills that require adaptability, initiative, and cross-cultural communication (Heckman & Kautz, 2012; Trilling & Fadel, 2009). The high score in emotional management aligns with the university's focus on Buddhist principles, which emphasize mindfulness and emotional regulation (Phra Dhammasinghapuracariya, 2015). However, the lower scores in other competencies suggest that these areas may not be sufficiently addressed in the current curriculum, highlighting the need for more targeted interventions. The successful development and implementation of the SBU-LCK Model demonstrate that a structured, competency-based approach can effectively address these gaps. The significant improvements observed in all six targeted competencies after the implementation of the model underscore the potential of experiential learning, self-directed projects, and leadership training in enhancing students' readiness for the challenges of the 21st century (Kolb, 1984; Lombardi, 2007). The increase in scores for flexibility and



adaptability, for example, suggests that students benefited from the problem-solving exercises and simulations that required them to respond to changing scenarios. Similarly, the improvement in social and cross-cultural skills indicates that collaborative projects and intercultural exchanges were effective in helping students develop the interpersonal skills needed for global citizenship (Deardorff, 2006).

7.2 Implications for Educational Practice: The findings of this study have significant implications for educational practice, particularly in the context of higher education in Thailand. First, the study highlights the importance of integrating life skills and career competencies into the curriculum to prepare students for the demands of the modern world. The success of the SBU-LCK Model suggests that universities should consider adopting similar frameworks that focus on experiential learning, self-directed activities, and leadership development. These approaches not only enhance students' competencies but also align with global educational trends that prioritize critical thinking, creativity, and collaboration (Dede, 2010; Voogt & Roblin, 2012). Moreover, the identified gaps in social and cross-cultural skills, as well as leadership, suggest that these areas should receive more attention in the curriculum. Universities could address these gaps by incorporating more collaborative projects, intercultural exchanges, and leadership opportunities into academic programs. Additionally, the focus on emotional management within the SBU-LCK Model highlights the value of incorporating mindfulness and stress management techniques into the educational experience, which can enhance students' overall well-being and academic performance (Goleman, 1995; Petrides et al., 2004). The findings also underscore the need for faculty development and support in implementing new teaching methods and curricula. As the study demonstrated, experiential and self-directed learning approaches require educators to adopt new roles as facilitators and mentors, guiding students through complex, real-world challenges. Providing professional development opportunities for faculty to learn and apply these methods is crucial for the successful integration of life skills and career competencies into the curriculum (Fullan, 2013; Darling-Hammond et al., 2020).

7.3 Challenges and Limitations: While the study provides valuable insights, it is important to acknowledge several challenges and limitations. One potential limitation is the sample size and scope of the study. Although the study included a diverse group of students from different faculties and academic years, the trial phase of the SBU-LCK Model was limited to 100 students. This may limit the generalizability of the findings to the broader student population at SBU and other institutions. Future research could expand the sample size and include multiple universities to validate and refine the model. Another limitation is the reliance on self-reported data from students, which may be subject to social desirability bias. Students may have provided favorable responses to reflect positively on their own abilities or to meet perceived expectations from the researchers. While the study attempted to mitigate this bias by ensuring anonymity and confidentiality, it remains a potential concern. Incorporating additional data sources, such as peer assessments or observational data, could provide a more comprehensive view of students' competencies and the impact of the SBU-LCK Model. The study also faced challenges in integrating the SBU-LCK Model into the existing curriculum. Some educators expressed concerns about the additional time and resources required to implement the model, particularly in terms of coordinating experiential



learning activities and providing individualized support to students. Addressing these challenges will require ongoing collaboration between faculty, administrators, and policymakers to ensure that the model can be sustained and scaled up effectively.

7.4 Future Research Directions: Building on the findings and limitations of this study, several avenues for future research emerge. First, future studies could explore the long-term impact of the SBU-LCK Model on students' life skills and career competencies. Longitudinal research could provide insights into how these competencies develop over time and how they influence students' academic and career outcomes. Additionally, further research could investigate the specific factors that contribute to the effectiveness of the model, such as the role of faculty support, student engagement, and the integration of technology in experiential learning. Comparative studies across different cultural and educational contexts would also be valuable in examining how the SBU-LCK Model can be adapted and implemented in diverse settings. Such research could contribute to the development of culturally responsive teaching practices that respect and incorporate the values and beliefs of the communities in which educators work. Finally, future research could explore the integration of other competencies, such as digital literacy and sustainability, into the model to provide a more comprehensive approach to 21st-century education. The findings of this study highlight the significant role that life skills and career competencies play in preparing students for the challenges of the 21st century. The successful development and implementation of the SBU-LCK Model at Mahachulalongkornrajavidyalaya University demonstrate that a structured, competency-based approach can effectively enhance these skills and contribute to students' overall readiness for modern life and work. However, the challenges and limitations identified in the study suggest the need for ongoing research and refinement of the model to ensure its sustainability and broader applicability. By addressing these areas, educators and policymakers can continue to improve the quality of higher education and better prepare students for the demands of a rapidly changing world.

8. CONCLUSION

This study explored the development and implementation of the SBU-LCK Model, designed to enhance life skills and career competencies among students at SBU. The research was conducted in four phases: assessing the current state of students' competencies, identifying gaps in the existing curriculum, developing the SBU-LCK Model to address these gaps, and evaluating its effectiveness through a pilot implementation. The findings revealed that while students at SBU possess a moderately high level of life skills and career competencies, there were significant areas for improvement, particularly in flexibility, social skills, and leadership. The SBU-LCK Model was developed to address these gaps, focusing on six key competencies: emotional management, flexibility, initiative, social skills, productivity, and leadership. The model was implemented in a selected group of students, with significant improvements observed in all targeted competencies following the intervention. The evaluation of the SBU-LCK Model highlighted its effectiveness in enhancing students' life skills and career competencies, as well as its potential for broader application in other educational contexts. The study also identified the need for continued



faculty support and professional development to ensure the successful integration of such models into existing curricula.

Originality & Body of Knowledge

Originality: This study contributes to the field of higher education by introducing the SBU-LCK Model, a structured framework designed to enhance 21st-century life skills and career competencies among university students. While the importance of life skills and career readiness has been widely recognized in educational research, this study uniquely integrates Buddhist principles with modern educational practices, offering a culturally relevant approach tailored to the Thai context. The model's focus on six key competencies - emotional management, flexibility, initiative, social skills, productivity, and leadership - provides a comprehensive and practical framework that addresses gaps in traditional curricula. By employing a research and development (R&D) approach, the study not only identifies the current state of students' competencies but also develops, implements, and evaluates an innovative model, offering actionable insights for other institutions seeking to enhance their students' readiness for the challenges of the 21st century.

Body of Knowledge: This study builds on existing literature by bridging the gap between theoretical frameworks and practical implementation in higher education. It draws on foundational works such as Trilling and Fadel's (2009) exploration of 21st-century skills and Goleman's (1995) research on emotional intelligence, while also incorporating insights from experiential learning (Kolb, 1984) and self-directed learning (Zimmerman, 2002). The findings align with global educational trends emphasizing the importance of critical thinking, collaboration, and adaptability (Dede, 2010; Voogt & Roblin, 2012), while also addressing the unique cultural and philosophical context of Thai education. By demonstrating the effectiveness of the SBU-LCK Model through empirical data, this study adds to the growing body of knowledge on competency-based education and provides a replicable framework for integrating life skills and career competencies into higher education curricula worldwide.

Declarations

Conflict of interest: The authors declare no conflicts of interest.

Ethical treatment of experimental subjects (animals & human): The research was conducted in compliance with the principles of the Helsinki Declaration regarding human subjects, so formal ethical approval was not required.

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