

Developing General Education Subjects for Learners in the 21st Century for Saint Louis College

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Abstract: The objectives of this research were to study the essential characteristics and skills learners need for success in the 21st century. Using a mixed-methods design, the study combined quantitative data from 660 student surveys with qualitative insights from focus group discussions, each consisting of 12 students. Data were analyzed using basic descriptive statistics (mean and standard deviation), the Modified Priority Needs Index (PNImodified), and content analysis. The findings revealed three key priority areas for learner development: *academic communication in a foreign language* (PNImodified = 0.47) as the most critical skill; *financial literacy* (PNImodified = 0.24) as the most needed knowledge area; and *leadership* (PNImodified = 0.26) as the most essential personal characteristic. Course evaluations further indicated that students valued clearly defined learning objectives and appreciated opportunities to learn about embracing diversity. Participants also recommended enhancing the curriculum with content related to creativity, leadership, language proficiency, media literacy, critical thinking, and life skills. The results underscore the importance of integrating in-class and out-of-class learning experiences to support holistic learner development.

Keywords: General education, 21st Century learners, Curriculum development, Learner competencies

Introduction

In Thailand, all undergraduate programs are required to include general education courses as part of their curricula. The concept, referred to interchangeably in Thai as General Education, General Studies, and Basic General Studies, corresponds to the English term General Education and originates from regulations issued in 1974, 1982, 1989, and 1999, which require students to complete at least 30 credits of general education coursework. According to the 1999 standards of the Office of the Higher Education Commission (OHEC), these courses are designed to foster well-rounded development by equipping students with broad knowledge, a global outlook, moral and ethical reasoning, appreciation of Thai and international arts and culture, effective communication, and the ability to apply knowledge in real-world contexts. This foundation was later reinforced through the Thai Qualifications Framework for Higher Education (TQF: HEd), introduced in 2009 and implemented nationwide in 2012, which specifies five expected learning outcome domains for graduates: ethics and morals, knowledge, cognitive skills, interpersonal skills and responsibility, and numerical, communication, and information technology skills.

National policy developments have continued to shape expectations for higher education. The National Education Standards B.E. 2561 (2018), approved by the Cabinet on October 2, 2018, outline the Desired Outcomes of Education (DOE Thailand), defining graduates of the “Thais 4.0” era as lifelong learners, innovative co-creators, and active, responsible citizens who preserve Thai identity while contributing to global competitiveness. The updated Higher Education Qualification Standards B.E. 2565 (2022) require institutions to align program-level learning outcomes with disciplinary identity, professional expectations, national development priorities, and global trends across four domains: knowledge, skills, ethics, and character.

As national standards evolve, the General Education Department of Saint Louis College recognizes the need to continuously review and improve its curriculum. This process

must ensure compliance with national frameworks while preserving the institution's identity as a private college under the Roman Catholic Archdiocese of Bangkok. The College aims to nurture graduates who embody academic competence, moral integrity, compassion, and respect for human dignity. Its six graduate attributes reflect these aspirations: adherence to twelve core virtues; commitment to lifelong learning grounded in critical thinking; continuous professional growth supported by creativity; leadership that contributes to professional and societal advancement; proficiency in information technology and multilingual communication; and the ability to live effectively in a multicultural society. These attributes are aligned with the twelve virtues promoted by the College, including honesty, benevolence, self-sacrifice, sincerity, perseverance, professional ethics, and discretion.

Rapid global changes, especially those associated with the Fourth Industrial Revolution and Thailand's transition toward Industry 4.0, have influenced learner behavior and skill requirements. Key competencies such as global awareness, financial literacy, civic literacy, health literacy, and environmental literacy are now essential for success. These priorities are reflected in national policy frameworks including the 20-Year National Strategy (2017–2036), the 12th National Economic and Social Development Plan (2017–2021), and the National Education Plan (2017–2036), all of which emphasize human development, lifelong learning, and 21st-century skills (Rukpholmuang et al., 2020).

Given these national directions and societal changes, this study aims to study a general education curriculum that responds to the needs of 21st-century learners at Saint Louis College. Specifically, it examines the characteristics and skills learners require to thrive in a rapidly changing world and explores perspectives from students, general education instructors, and curriculum administrators.

Research Methodology

This study employed a mixed-methods research design, combining both quantitative and qualitative approaches. The quantitative component involved a survey using structured questionnaires distributed to students, program administrators, and faculty members. The purpose of the survey was to gather broad insights into perceptions and needs related to general education at Saint Louis College.

Following the survey, qualitative data was collected through focus group discussions. These discussions were conducted with key stakeholders, including current students, alumni, and employers, to gain deeper perspectives and practical suggestions for the development of a general education curriculum that aligns with the needs of learners in the 21st century.

Research Participants: The target population comprised undergraduate students enrolled at Saint Louis College during the 2022 academic year. Data were collected from the entire population of 754 students, and 660 completed questionnaires were included in the analysis. Three focus group discussions were conducted, each consisting of 12 participants. Student participants represented all faculties, Nursing, Physical Therapy, and Psychology, and all year levels. Additional groups included faculty members, alumni, and employers. Participation was voluntary, and all participants were informed of the purpose and procedures of the study.

Research Instruments: This study employed two primary research tools: a structured questionnaire and a set of guided focus group discussion questions. Both instruments were designed to gather comprehensive data on the necessary characteristics and skills of 21st-century learners, specifically within the context of Saint Louis College.

Questionnaire: The questionnaire on the necessary characteristics and skills of 21st-century learners was developed by the researcher and comprised four sections. Section 1 gathered general information using a checklist that included basic demographic data such as faculty and academic year. Section 2 focused on the necessary skills and characteristics of learners, with items addressing general skills, knowledge, literacy and awareness, and personal traits. Section 3 explored students' perspectives on the current needs in general education by assessing their opinions on existing courses and their interest in new subject areas, using a 5-point Likert scale. Section 4 provided an open-ended space for respondents to offer written comments and recommendations. The interpretation of responses in Section 3 was based on Best's (1981) criteria: scores from 4.50–5.00 indicated the highest level of agreement, 3.50–4.49 a high level, 2.50–3.49 a moderate level, 1.50–2.49 a low level, and 1.00–1.49 the lowest level of agreement.

Focus Group Discussion: To explore deeper qualitative insights, the researcher conducted focus group discussions guided by a series of open-ended questions. These discussions were designed to explore students' perceptions regarding their academic preparation and future professional needs. The key areas of inquiry included: (1) the qualities students believe should be integrated into the profile of a Saint Louis College graduate; (2) the confidence and competencies students perceive as necessary for workforce entry, along with additional learning needs beyond their current academic programs; (3) recommendations for new subjects, whether as part of the general education curriculum or as elective offerings; (4) specific skills students wish to develop further through targeted instruction or training; (5) preferred teaching methodologies that students believe would enhance their skill acquisition; and (6) suggestions for improving course content and instructional approaches. The responses from these discussions were intended to complement the quantitative data and provide a more comprehensive understanding of learner expectations and educational development priorities.

Validity: The research instruments were evaluated using the Item-Objective Congruence (IOC) index, in which +1 indicates full alignment with the learning objectives, 0 indicates uncertainty, and –1 indicates non-alignment. Expert reviewers rated all items positively, yielding IOC values between 0.67 and 1.00. These results confirm that the instruments demonstrated acceptable validity and were appropriately aligned with the research objectives.

Reliability: To assess reliability, the questionnaire was piloted with a group of 30 individuals who were not part of the main study sample. The results yielded a Cronbach's Alpha Coefficient of 0.88, indicating a high level of internal consistency.

Data Collection: Data collection took place from February to March 2024 for the survey component. Focus group discussions were subsequently conducted in April 2024.

Quantitative Data Analysis: The data were analyzed using basic statistical techniques, including the calculation of mean scores and a needs assessment framework to identify and prioritize essential learner requirements. This analysis aimed to determine the gap between the current state and the desired state of student development. To quantify the level of need, both the Priority Needs Index (PNI) and the Modified Priority Needs Index (PNI_{modified}) were employed, based on the methodology proposed by Wongwanich (2007). The formulas used were as follows: $PNI = (I - D) \times I$ and $PNI_{modified} = (I - D) / D$ where I represents the mean score of the desired characteristics (importance), and D represents the mean score of the current characteristics (degree of success). In ranking the priority of educational needs, the PNI_{modified} value was used as the primary criterion. In cases where PNI_{modified} values were equal, the original PNI values were used to determine priority.

Group conversation data analysis: Content analysis was used to analyze the data from the focus group discussions.

Research results

The majority of the student samples were nursing students, totaling 493 individuals (74.70%), followed by psychology students with 89 individuals (13.48%), and physical therapy students with 78 individuals (11.82%). The skills and attributes necessary for working and living in the 21st century is presented in the table below.

Table 1: Priority Needs Index of Generic Skills for 21st-Century Work and Life (N = 660)

Generic Skills	Perceived Importance		Current Performance		PNI	PNI _{modified}	Rank
	M	SD	M	SD			
1. Critical thinking and problem-solving	4.57	0.65	3.79	0.77	3.56	0.21	7
2. Creative thinking	4.42	0.69	3.71	0.82	3.14	0.19	8
3. Analytical thinking	4.53	0.70	3.71	0.81	3.71	0.22	6
4. Systematic numerical thinking	4.35	0.79	3.47	0.87	3.83	0.25	3
5. Information technology usage	4.58	0.66	4.06	0.84	2.38	0.13	13
6. Thai communication in daily life	4.55	0.72	4.22	0.81	1.50	0.08	15
7. Thai academic communication	4.32	0.82	3.67	0.88	2.81	0.18	9
8. Foreign language communication in daily life	4.51	0.81	3.17	0.96	6.04	0.42	2
9. Foreign language academic communication	4.32	0.88	2.94	1.02	5.96	0.47	1
10. Interpersonal communication	4.50	0.72	3.86	0.85	2.88	0.17	10
11. Social life skills	4.67	0.62	4.22	0.79	2.10	0.11	14
12. Team building and teamwork	4.63	0.63	4.05	0.82	2.69	0.14	12
13. Intrapersonal conflict management	4.56	0.67	3.98	0.89	2.64	0.15	11
14. Time management	4.65	0.65	3.81	0.89	3.91	0.22	5
15. Entrepreneurial/Business ownership skills	3.99	0.95	3.20	1.05	3.15	0.25	4
Average	4.48	0.50	3.72	0.57	3.37	0.20	

Based on Table 1, the top five essential skills and attributes for working and living in the 21st century, ranked by students according to the Modified Priority Needs Index (PNI_{modified}), are: (1) academic foreign language communication, (2) everyday foreign language communication, (3) systematic thinking and calculation, (4) entrepreneurship or business ownership, and (5) time management. Notably, everyday Thai language communication received the lowest PNI_{modified} value, indicating the least perceived need for development among the listed skills.

Table 2: Priority Needs Index of Knowledge, Literacy, and Awareness Skills for the 21st Century (N = 660)

Knowledge, Literacy, and Awareness Skills	Perceived Importance		Current Performance		PNI	PNI _{modified}	Rank
	M	SD	M	SD			
1. Personal Financial Planning	4.65	0.60	3.74	0.82	4.23	0.24	1
2. Digital and Media Literacy	4.67	0.60	4.13	0.75	2.52	0.13	6
3. Health Literacy	4.63	0.60	3.96	0.80	3.10	0.17	3
4. Civic Responsibility	4.58	0.67	4.14	0.81	2.02	0.11	8
5. Environmental Awareness	4.52	0.72	3.99	0.85	2.40	0.13	7
6. Scientific Thinking and Problem Solving	4.46	0.70	3.76	0.87	3.12	0.19	2

Table 2: (continue)

Knowledge, Literacy, and Awareness Skills	Perceived Importance		Current Performance		PNI	PNI modified	Rank
	M	SD	M	SD			
7. Sufficiency Economy and Sustainability	4.02	1.04	3.46	0.97	2.25	0.16	4
8. Social Adaptability and Diversity	4.54	0.71	3.99	0.82	2.50	0.14	5
9. Thai Cultural Pride and Preservation	4.07	1.02	3.66	0.99	1.67	0.11	9
10. Aesthetic and Artistic Appreciation	4.30	0.87	3.95	0.95	1.51	0.09	10
Average	4.44	0.53	3.88	0.60	2.51	0.15	

According to Table 2, which presents the Modified Priority Needs Index (PNI_{modified}) for essential skills and characteristics required for working and living in the 21st century—based on knowledge, literacy, and awareness, the top five prioritized areas are: Personal Financial Planning, Scientific Thinking and Problem Solving, Health Literacy, Sufficiency Economy and Sustainability, and Social Adaptability and Diversity. These competencies reflect the most significant gaps between current performance and desired outcomes as perceived by the participants. In contrast, Aesthetic and Artistic Appreciation received the lowest priority, indicating it was viewed as the least urgent area for development.

Table 3: Priority Needs Index of Personal Attributes for Working and Living in the 21st Century (N = 660)

Personal Attributes	Perceived Importance (Expectation)		Current Performance (Reality)		PNI	PNI modified	Rank
	M	SD	M	SD			
1. Lifelong Learning Mindset	4.63	0.64	3.88	0.82	3.47	0.19	3
2. Openness to New Experiences for Career Readiness	4.70	0.56	4.05	0.80	3.06	0.16	4
3. Decision-Making and Responsibility	4.66	0.60	4.10	0.82	2.61	0.14	7
4. Adaptability and Open-Mindedness	4.63	0.62	3.98	0.84	3.01	0.16	5
5. Perseverance	4.54	0.71	4.02	0.85	2.36	0.13	8
6. Positive Thinking	4.66	0.62	4.05	0.88	2.84	0.15	6
7. Leadership	4.52	0.70	3.60	0.92	4.16	0.26	1
8. Self-Confidence and Pride	4.64	0.65	3.85	0.93	3.67	0.21	2
9. Social Norm Awareness	4.69	0.63	4.30	0.78	1.83	0.09	10
10. Social Responsibility	4.75	0.55	4.34	0.73	1.95	0.09	9
11. Moral and Ethical Conduct	4.59	0.75	4.20	0.85	1.79	0.09	11
Average	4.64	0.49	4.03	0.60	2.80	0.15	

Table 3 presents the Priority Needs Index (PNI_{modified}) for personal attributes essential to working and living in the 21st century, based on responses from 660 participants. The analysis revealed that the five highest-priority personal characteristics, based on the PNI_{modified} values, were: (1) leadership, (2) self-confidence and pride, (3) curiosity and a commitment to lifelong learning, (4) openness to new experiences, and (5) adaptability to change and diversity. These attributes are deemed essential for individuals to succeed in an increasingly dynamic and interconnected global context. In contrast, moral and ethical conduct received the lowest PNI_{modified} value, indicating a comparatively lower perceived need for development in this area among respondents.

Table 4: Average Scores and Standard Deviations of Student Opinions on the Management of General Education Courses (N = 660)

Management of General Education Courses	M	SD	Interpretation
<i>Teaching and Course Management Quality</i>			
1. The course objectives are clearly defined and understandable	4.21	0.83	High
2. Total required credits for general education (30 credits)	3.90	0.89	High
3. Required credits in each subject group			
3.1 Humanities and Social Sciences	3.80	0.93	High
3.2 Mathematics and Science	3.81	0.92	High
3.3 Languages	3.99	0.92	High
4. Course content is up-to-date	4.10	0.94	High
5. Course content is applicable to daily life	4.17	0.92	High
6. A variety of elective courses are offered	3.71	1.20	High
7. Instructor assignments are appropriate	3.95	1.02	High
8. Assessment components (assignments, midterm, final) are appropriate	3.91	0.96	High
9. Instructional methods are engaging and modern	3.77	1.04	High
10. Teaching encourages curiosity and student participation	3.78	1.08	High
Average	3.93	0.69	High
<i>Benefits from General Education Courses</i>			
1. Understanding oneself and others	4.12	0.87	High
2. Acceptance of diversity	4.25	0.83	High
3. Communication and teamwork skills	4.20	0.77	High
4. Knowledge-seeking skills	4.10	0.81	High
5. Learning and life skills	4.17	0.84	High
6. Intellectual, emotional, and social development	4.21	0.82	High
7. Awareness and citizenship	4.09	0.92	High
8. Adaptability to economic, social, and environmental changes	4.08	0.88	High
9. Understanding social structures	4.15	0.85	High
10. Appreciation of and pride in Thai identity	3.87	1.02	High
11. Information technology skills	4.05	0.91	High
12. Analytical and numerical skills	3.90	0.93	High
Average	4.10	0.69	High
Overall Average	3.98	0.65	High

Table 4 presents the average scores and standard deviations reflecting student opinions on the management of general education courses. Overall, students rated both the teaching and course management quality and the benefits of general education courses at a high level. In the area of teaching and course management quality, the three highest-ranked aspects were: (1) the course objectives are clearly defined and understandable, (2) the course content is applicable to daily life, and (3) the course content is up-to-date. The aspect ranked lowest in this category was the variety of elective courses offered. Regarding the perceived benefits of general education courses, the top three items were: (1) acceptance of diversity, (2) intellectual, emotional, and social development, and (3) communication and teamwork skills. The lowest-ranked item in this section was appreciation of and pride in Thai identity.

The results of the focus group discussion, conducted with student representatives from all faculties—namely the Faculty of Nursing, Faculty of Psychology, and Faculty of Physical Therapy—and across all academic years, are summarized as follows:

In response to the question, “*What additional personal attributes do you think students should possess beyond those outlined in the Saint Louis College student profile?*” the discussion revealed that the desirable attributes include: creativity, leadership, self-expression, individuality, enthusiasm, social adaptability, work motivation, and flexibility in the workplace. These qualities were considered important because some students

experience difficulties when working in groups, particularly in terms of decision-making, respecting others' opinions, listening to feedback, showing mutual respect, and maintaining a positive attitude.

In response to the question, *“If you had to enter the workforce in the future, how confident would you feel, and what additional subjects do you think should be learned beyond what is currently taught?”*, most students reported a moderate level of confidence. They suggested that additional content should include stress management, psychological coping strategies for challenging situations, personality development, public speaking, presentation skills, English language use (especially for daily conversation, reading, and correct pronunciation), Thai language skills, email writing, job application documents, and the use of office software for work purposes. Students also recommended learning how to prepare professional documents, create media such as posters and video clips, improve analytical thinking and reasoning, and develop life skills and negotiation abilities.

In response to the question, *“What courses do you think the college should offer, whether as general education or free electives?”* students suggested that the college should provide general education or elective courses that can be applied to everyday life and professional careers. These include public speaking, personality development, confidence-building through speech, logical reasoning, and analytical thinking skills to help students become thoughtful and quality decision-makers. Additionally, students recommended courses that promote survival skills, such as cooking, self-defense, physical fitness, and up-to-date computer program knowledge. Other suggested topics include entrepreneurship, financial literacy, investment, language learning, art, and drawing—especially to foster concentration and reduce stress.

In response to the question, *“What skills would you like to learn, train in, or further develop?”* students expressed a desire to improve and develop a range of skills. These include public speaking, personality development and conduct, systematic analytical thinking, and communication skills—specifically listening, speaking, reading, and writing with clarity and structure. Students also mentioned the importance of summarizing key ideas, learning additional foreign languages, and preparing for exams such as TOEFL. Other key skills include teamwork, off-campus training for experiential learning, and critical and analytical thinking that can be applied to their future careers. Students emphasized the value of gaining experience both inside and outside the classroom and suggested that skill development should be tailored to each academic year—for example, first-year students should focus on adaptation skills, while upper-year students should strengthen skills related to professional work.

In response to the question, *“What type of teaching methods would you like instructors to use in order to help develop the additional skills you need?”* students expressed a preference for learning that is engaging, enjoyable, exciting, and able to capture their attention. They suggested reducing lecture-based teaching and incorporating more activities, games, skill-building exercises, and stress-relief elements. Students emphasized the importance of hands-on learning, allowing them to try new things and practice real-world applications. Instruction should focus on students understanding and aligning with their future careers. In terms of English language learning, students recommended more practical usage and opportunities to apply the language in real-life contexts. A combination of in-class and off-campus learning experiences was also encouraged. Additionally, they suggested assignments that involve analyzing texts, readings, articles, and research, along with a blended approach of lectures and project-based learning, appropriately adjusted to each course.

In response to the question, “*Do you have any suggestions regarding the courses and teaching methods?*” students offered several recommendations. They suggested that some courses should revise their content by inviting guest speakers and including off-campus learning opportunities. They also recommended reducing the amount of homework, ensuring that assigned work is appropriate in volume, clearly communicated, and aligned with students’ capabilities. Students requested a reduction in academic workload, particularly for project-based assignments, and proposed that instructors should coordinate when assigning such tasks. For project activities, they emphasized the need for appropriate scheduling. Additionally, they suggested adjusting the content and activities in the “Thai Ways in the Global Context” course, which they felt may be overly extensive. They also noted that the “Health and Exercise” course may not suit university-level students. For the ethics course, students asked for fewer assignments, as some tasks incur out-of-pocket costs for activities.

Discussion

The research findings on essential skills and attributes for working and living in the 21st century highlighted key priorities across three domains. In the area of generic skills, academic communication in a foreign language was ranked as the most important. For knowledge, literacy, and awareness, the highest priority was the ability to understand and manage personal finances. In terms of personal attributes, leadership emerged as the top characteristic. These findings are consistent with those of Rukpholmuang et al. (2020) whose study on the development of a general education model at Siam University identified communication in both Thai and foreign languages as essential skills. Their research also ranked legal and political literacy, followed by financial literacy, as the most important aspects of awareness, while leadership, self-confidence, and pride were considered the most important personal characteristics. Similarly, Sitthilop (2023), in his research on 21st-century workplace skills based on secondary data from Thai Journal Online, Google Scholar, and YouTube videos published between 2018 and 2022, categorized essential skills into five key areas: physical skills (involving bodily capability and strength), social skills (communication and interpersonal relationships), cognitive skills (including digital literacy, information management, and problem-solving), leadership skills (related to management and influence), and self-management skills (such as self-development and personal organization). These comparative findings further reinforce the relevance and applicability of the skills identified in this study and support their integration into general education and curriculum development.

In addition, Benjawon et al. (2016) emphasized that “*New Future Skills: Learning in the 21st Century*” are crucial areas for higher education institutions to focus on in order to effectively develop students and guide them toward success. These essential areas include: 1) Global Awareness, 2) Financial, Economic, Business, and Entrepreneurial Literacy, 3) Civic Literacy, 4) Health Literacy, and 5) Environmental Literacy. Furthermore, Noimala (2021) identified literacy skills as essential for developing knowledgeable and well-rounded thinkers and researchers. These skills include information literacy, media literacy, and technology literacy, all of which emphasize the ability to assess and process new information—especially that found online. He proposed six foundational literacies: 1) Language Literacy, 2) Numeracy, 3) ICT Literacy, 4) Scientific Literacy, 5) Cultural and Civic Literacy, and 6) Financial Literacy. Additionally, Noimala (2021) highlighted leadership as one of the nine essential 21st-century skills for all professions. He noted that

leadership is no longer reserved for managers; rather, it is a skill that everyone must possess—even at the entry level—because it opens greater opportunities for the future. Leadership today encompasses qualities such as humility, decisiveness, and the ability to manage tasks effectively. Experience is considered the best teacher in developing this skill. Practical ways to foster leadership include volunteering to lead projects or taking initiative in decision-making in daily life.

In the area of general education course management, the findings revealed two key aspects: Regarding the quality of teaching and course management, the three highest-rated components were: (1) clearly defined course objectives that aid student understanding, (2) course content that can be applied to everyday life, and (3) up-to-date course material. In contrast, the availability of diverse elective courses aligned with student interests received the lowest average rating. As for the benefits gained from general education courses, the top three aspects were: (1) understanding and accepting people with differences and diversity, (2) intellectual, emotional, and social development, and (3) the ability to communicate and work effectively with others. The lowest-rated benefit was appreciation of and pride in Thai identity. These findings are consistent with the study by Inprasoe (2020), which explored the attitudes of undergraduate students at Thammasat University toward general education courses and the GREATS characteristics. The study focused on students in science and technology disciplines, including those from the Faculty of Science and Technology, Faculty of Engineering, Faculty of Architecture and Urban Planning, and Sirindhorn International Institute of Technology, with a total of 331 participants. The quantitative research findings reveal the following key points: (1) the content of general education courses is aligned with current society changes, enabling students to apply the knowledge gained to future employment; (2) instructors play a critical role in the teaching and learning process, helping students achieve the learning goals outlined in course plans; (3) teaching methods should be varied, with continuous development of instructional activities and techniques to enhance learning outcomes; (4) the classroom environment and learning atmosphere are important, especially in large classrooms where multiple display screens are recommended to ensure visibility for all students; and (5) in terms of assessment and evaluation, instructors should clearly inform students in advance about the methods and criteria to be used, promoting transparency and preparedness. These findings are supported by previous studies on the development of general education curricula aimed at fostering 21st-century citizenship. Banjongpru (2018) conducted research focusing on students enrolled in the Art and Creativity course and reported a high level of satisfaction with the overall course design. The top three areas of satisfaction were: (1) students felt that others should have the opportunity to participate in the course activities, (2) students observed positive behavioral changes after taking the course, and (3) course activities helped them acquire new skills and build strong peer relationships. Similarly, Chantharak (2018) studied the development of general education teaching models aligned with Thailand's National Qualifications Framework for Higher Education (NQF) at Dusit Thani College. The study found that general education was delivered through an integrated model that connected academic knowledge with everyday life and emphasized self-understanding, empathy, societal awareness, adaptability, and holistic personal development. Two main factors influenced the effectiveness of general education instruction: instructional factors (such as instructors' knowledge, teaching methods, and the use of integrated models), and supporting factors (such as a positive learning environment and effective course management). Furthermore, Promwong (2021) proposed a learning management model to promote global citizenship among undergraduate students in Thai higher education institutions. The model consists of four core components: BELIEVE, which fosters self-awareness, ethical values, and appreciation for society and the

environment through student-centered strategies such as self-directed learning, integrated learning, project-based learning, and service learning; EXPECT, which emphasizes goal setting to develop global citizenship traits; ASPIRE, which ensures instructional alignment with citizenship values and lifelong learning; and RESULT, which defines the expected outcomes of global citizenship. The ASPIRE framework includes six key elements: Activity (A), focusing on experiential learning; Skills (S), targeting competency development; Participation (P), promoting collaboration; Integration (I), encouraging interdisciplinary application; Readiness (R), ensuring learner preparation; and Environment (E), creating supportive learning conditions. The model aims to develop students who are open-minded, culturally aware, lifelong learners capable of peaceful coexistence and active contributions to a just and inclusive global society. Suggestion for research were as follow.

1. The essential skills and attributes for working and living in the 21st century can be categorized into three key domains:

1.1 Generic Skills – The three most highly prioritized skills and attributes in this domain are: (1) academic communication in a foreign language, (2) everyday communication in a foreign language, and (3) systematic numerical reasoning.

1.2 Knowledge, Literacy, and Awareness – The top three priorities in this area are: (1) the ability to understand and manage personal finances, (2) the ability to search for information systematically and apply scientific knowledge to problem-solving and daily life, and (3) the ability to access, evaluate, and apply health-related information to enhance one's physical, mental, and emotional well-being.

1.3 Personal Attributes – The three most essential personal attributes identified for working and living in the 21st century are: (1) leadership, (2) self-confidence and self-pride, and (3) curiosity and the ability to engage in lifelong learning.

2. The overall findings on the management of general education courses indicate a high level of effectiveness in both teaching quality and the benefits derived from these courses. In terms of teaching and course management quality, the three most highly rated aspects were: (1) clearly defined course objectives that enhance student understanding, (2) course content that is applicable to everyday life, and (3) up-to-date course material. The lowest-rated aspect in this area was the variety of elective courses available to students. Regarding the perceived benefits of general education, the top three aspects were: (1) understanding and accepting people with differences and diversity, (2) development of intellectual, emotional, and social capacities, and (3) effective communication and collaboration with others. The lowest-rated benefit was appreciation of and pride in Thai identity.

3. In the focus group discussions, students expressed a desire to see additional personal attributes included in the profile of Saint Louis College graduates, such as creativity and leadership. They also suggested a need for further learning beyond the existing curriculum to better prepare for future careers. Examples included stress management, psychological resilience, personality development, English and Thai language proficiency, media design, analytical thinking, and essential life skills. Additionally, students highlighted the importance of further training in specific skill areas such as public speaking, systematic analytical thinking, and accurate communication across listening, speaking, reading, and writing, proficiency in other foreign languages, preparation for the TOEFL exam, teamwork, and experiential learning both inside and outside the classroom.

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