




The historical evolution of liberal arts education: A systematic scoping review with global perspectives and future recommendations

Nattanee Satchanawakul^a , Nucharapon Liangruenrom^{b,*} 

^a Faculty of Liberal Arts, Mahidol University, Thailand

^b Institute for Population and Social Research, Mahidol University, Thailand

ARTICLE INFO

Keywords:

Interdisciplinary education
Education reform
Academic globalization
Education policy strategies

ABSTRACT

The interdisciplinary concept of liberal arts education, rooted in Western traditions, has been widely studied, yet its global shifts remain underexplored. This systematic scoping review was conducted through six databases for search up to May 2023. Out of 11,193 screened articles, a total of 295 studies were included to explore the global evolution of liberal arts education, focusing on its adaptive responses to political, social, and economic shifts. Three distinct phases in the evolution of liberal arts education have been identified: its philosophical foundations, the shift toward professional and market-driven demands, and a recent resurgence integrating traditional values with contemporary skills. Highlighting a shift towards a hybrid model, the study identifies a growing emphasis in recent literature on integrating diverse cultural perspectives, particularly from non-Western contexts, as a means to cultivate critical thinkers with multidisciplinary skills for navigating global challenges. This research fills a gap in understanding liberal arts' global adaptability, offering strategic insights into its role in addressing future educational needs.

1. Introduction

The liberal arts tradition, with its origins in ancient Greece, focused on cultivating a broad intellectual foundation that included philosophy, rhetoric, and the sciences as pathways to moral and civic virtue. This approach was later revitalized in medieval European universities, where the trivium (grammar, rhetoric, logic) and quadrivium (arithmetic, geometry, music, astronomy) formed the backbone of a liberal education intended to produce learned and ethical individuals (Nishimura & Sasao, 2019; Nussbaum, 2003). The liberal arts underwent a major transformation when introduced to the United States in the 19th century (Lang, 1999). American institutions embraced and expanded the model, emphasizing holistic development, critical thinking, and civic responsibility alongside academic rigor (Wang & Liu, 2021).

As the Industrial Revolution shifted global education towards vocational training, the U.S. remained uniquely committed to liberal arts, reinforcing its role in fostering intellectual versatility and personal growth (Lang, 1999; Nussbaum, 2010). This American adaptation not only emphasized breadth of knowledge across disciplines but also aimed to cultivate independent thinkers capable of democratic engagement. As noted by scholars like Martha Nussbaum and William Cronon, this

approach positioned liberal arts as an essential means of fostering democratic ideals and personal autonomy (Cronon, 1998; Nussbaum, 2010). The American model of liberal arts education has subsequently become a beacon and an archetype for liberal arts programs at universities around the globe (Gleason, 2018; Mino, 2021; Spires, 2017; van der Wende, 2011).

Today, as global education systems face challenges such as a fluctuating economic landscape, complex social dilemmas, and pressing global concerns, higher education institutions worldwide are increasingly adapting to the need for interdisciplinary and more integrative forms of education (Diana Rhoten et al., 2000; Repko & Szostak, 2021). Research highlights the liberal arts' adaptability in bridging the humanities, social sciences, and natural sciences, offering a cohesive educational framework well-suited to addressing 21st-century challenges (Ming et al., 2023).

The global landscape of liberal arts education is experiencing a renaissance, with increasing recognition of its value beyond traditional Western settings (Gleason, 2018; Godwin & Altbach, 2016; Jung et al., 2016; Mino, 2021; Spires, 2017). Recent studies illustrate the growing appeal of interdisciplinary liberal arts programs in the Global South and Asia, where they address the demand for culturally responsive and

* Corresponding author.

E-mail addresses: nattanee.sat@mahidol.ac.th (N. Satchanawakul), nucharapon.lia@mahidol.ac.th (N. Liangruenrom).

<https://doi.org/10.1016/j.ijedro.2025.100482>

Received 14 December 2024; Received in revised form 16 May 2025; Accepted 17 May 2025

Available online 21 May 2025

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socially aware graduates (de Wit & Altbach, 2020; Godwin, 2015). Across the Middle East, East Asia, South Asia, and Southeast Asia, liberal arts education is being redefined through reforms that emphasize regional histories and local cultural values, alongside global competencies. In the Middle East, several universities are exploring liberal arts models to foster critical thinking and curricular flexibility within culturally rooted frameworks (Hemmy & Mehta, 2021). In China, programs increasingly draw on Confucian heritage and moral education, while India's National Education Policy promotes multidisciplinary learning rooted in diverse traditions (Cheng & Zhang, 2020; Latika et al., 2024). Japanese and South Korean universities have integrated liberal arts with global citizenship and holistic education, including the development of residential colleges (Chen, 2020; Paek, 2021). In Singapore, initiatives like Yale-NUS College localize liberal arts to reflect Asian values in a global context (Lewis, 2024). Similar efforts in Indonesia also aim to foster critical thinking and intercultural understanding (Matthew R. Malcolm et al., 2021). These developments collectively challenge Western-centric paradigms and the notion of a 'global monoculture' (Marginson, 2022), pointing toward more context-sensitive models of liberal education.

The COVID-19 pandemic also highlighted the challenges in addressing polarization and hate crimes—anti-Asian, anti-Semitic, anti-Black, and homophobic—emphasizing the critical role of liberal education in preparing individuals to confront these complex social issues (Jung & Mok, 2023). However, empirical research on the adaptation of liberal arts education in these regions remains limited, signaling the need for studies that examine its impact on producing graduates equipped for today's multicultural societies. The resurgence of liberal arts education signals a broader educational shift, offering holistic policy solutions that meet the diverse, interconnected demands of today's global community. This evolution reflects its journey from ancient roots to modern global relevance.

The scope and nature of liberal arts education vary significantly across cultural, historical, and economic contexts (Beck, 2012; Paul, 1989). Despite extensive scholarly discussion, the literature lacks a comprehensive, cross-cultural analysis of how liberal arts education has evolved globally, particularly outside Western contexts. This gap is especially pronounced in regions where liberal arts is re-emerging amid pressures for utilitarian, industry-oriented training, making it difficult to understand how liberal arts can remain relevant under neoliberal demands and rapidly changing job markets. This study addresses these gaps by examining how liberal arts education adapts across diverse global contexts, identifying core attributes that sustain its relevance, and proposing educational models to support its resilience in addressing modern challenges.

Through a systematic scoping review, this study offers a comprehensive analysis of liberal arts' global evolution, providing insights to guide future educational policy. By mapping historical trends and key literature, it underscores liberal arts' foundational role in 21st-century education. This research aims to inspire educational systems and inform policymakers, advocating for the integration of liberal arts in global policy frameworks as essential for addressing contemporary challenges.

2. Methods

2.1. Search strategy

This scoping review followed the Preferred Reporting Items for Systematic review and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines (Peters et al., 2015). It was conducted using six databases for search from the database inception to May 2023. These included Scopus, PubMed/MEDLINE, Web of Science, ERIC, ScienceDirect and ProQuest. Each database was searched through their own search engine. The search was conducted through title, abstract, and keywords of the indexed articles across included databases. The search keywords

combined 'liberal arts', 'arts and sciences' and 'higher education'. Prior to searching process, a pilot study was conducted using these keywords on Scopus for feasibility test. The detailed search strategies used for each database can be found in Supplementary file 1.

2.2. Study selection and inclusion criteria

All references recruited from the searches of all databases were exported in EndNote 21 program, and duplicates of all records would be automatically removed by the program. Two researchers (Author 1 and Author 2) conducted an independent study selection, starting from a manual removal of additional duplicates. Once all duplicates were removed, unique references were screened through title, abstract, and full-text, respectively. Where there was any discrepancy between study selections, the two researchers would discuss and decide whether to include or exclude the articles. The inclusion criteria of the present review were (1) studies focusing on the development of liberal arts education in higher education settings; (2) journal articles including conference paper, research report, and thesis or dissertation; (3) publications written in English; (4) any type of research design; and (5) full-text availability. Liberal arts education, also referred to as liberal arts, or liberal education, is defined in this review based on existing literature as an educational model emphasizing broad-based knowledge, critical thinking, and interdisciplinary learning (Boyle, 2022). To ensure consistency, studies were included if they explicitly examined liberal arts education within these conceptual boundaries. The exclusion criteria were all types of reviews, protocols, guidelines, opinion literature, commentary, editorial letters, book or book chapters, and website.

2.3. Data extraction and synthesis

The following data were extracted from each study included in the present review: (a) bibliographical information, including author(s), year of publication, title, and country of study; (b) research methodology, including research problem(s), objective(s), study design, and research method; and (c) key findings, including area of focus, opportunity, challenge, and implication or recommendation. The full data extraction table can be found in Supplementary file 2. To provide evidence of existing practices on the development of liberal arts education, the extracted data were summarized and presented into five parts; i) study characteristics; ii) empirical evidence to facilitate the development of liberal arts education; iii) key areas of focus in liberal arts education; iv) challenges in liberal arts education; and v) recommendations for future direction.

Additionally, thematic categories were identified through an iterative coding process, in which recurring patterns and concepts across the selected studies were systematically reviewed. Themes were derived inductively from the findings to ensure they reflected major areas of discourse within the reviewed literature. The categorization process involved multiple rounds of refinement to enhance conceptual clarity and minimize overlap. Where applicable, sub-themes were also identified within each category to highlight major trends and focal points emerging from our systematic review process.

3. Results

3.1. Search results

A total of 11,193 references were identified from database searches, of which were found on Scopus (760 records), PubMed/MEDLINE (31 records), Web of Science (3085 records), ERIC (296 records), ScienceDirect (21 records) and ProQuest (7000 records). Once an automatic exclusion of duplicates by EndNote (580 records) and manual removal of remaining duplicates (214 records) were completed, unique records of 10,399 were screened. Based on title and abstract, 9495 articles were excluded. A full text of 904 articles were assessed, and 295 of them were

eligible to be included in this review according the inclusion and exclusion criteria. The flow diagram for the search and selection process is illustrated in Fig. 1.

3.2. Study characteristics

All articles included in the review were published between 1970 and 2023. The number of studies published per year shows an increasing trend, especially after 2004, but the number of studies started to decrease in 2021 (Fig. 2). Most studies were journal articles ($n = 273$; 92.5 %), followed by conference papers ($n = 20$; 6.8 %), and reports ($n = 2$; 0.7 %). More than half of the studies ($n = 171$; 58 %) focused on a single country from among 20 countries. Among these, most were conducted in the United States (65.5 %), followed by China (5.8 %), the Russia Federation (4.1 %), Canada (3.5 %), the United Kingdom (3.5 %), and The Netherlands (3.5 %). About 38.3 % ($n = 113$) did not focus on any particular country, while 11 studies focused on multiple countries. Most studies used a qualitative method ($n = 264$; 89.5 %), while 27 studies used quantitative methods and 4 studies used mixed-methods. In terms of research design, most studies were descriptive ($n = 257$; 87.1 %), followed by explanatory research ($n = 32$; 10.9 %), correlational research ($n = 5$; 1.7 %), and experimental research ($n = 1$; 0.3 %).

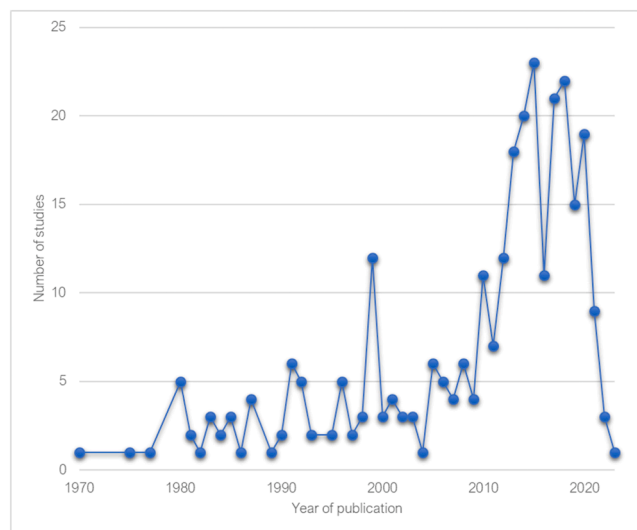


Fig. 2. The number of studies on liberal arts education published per year.

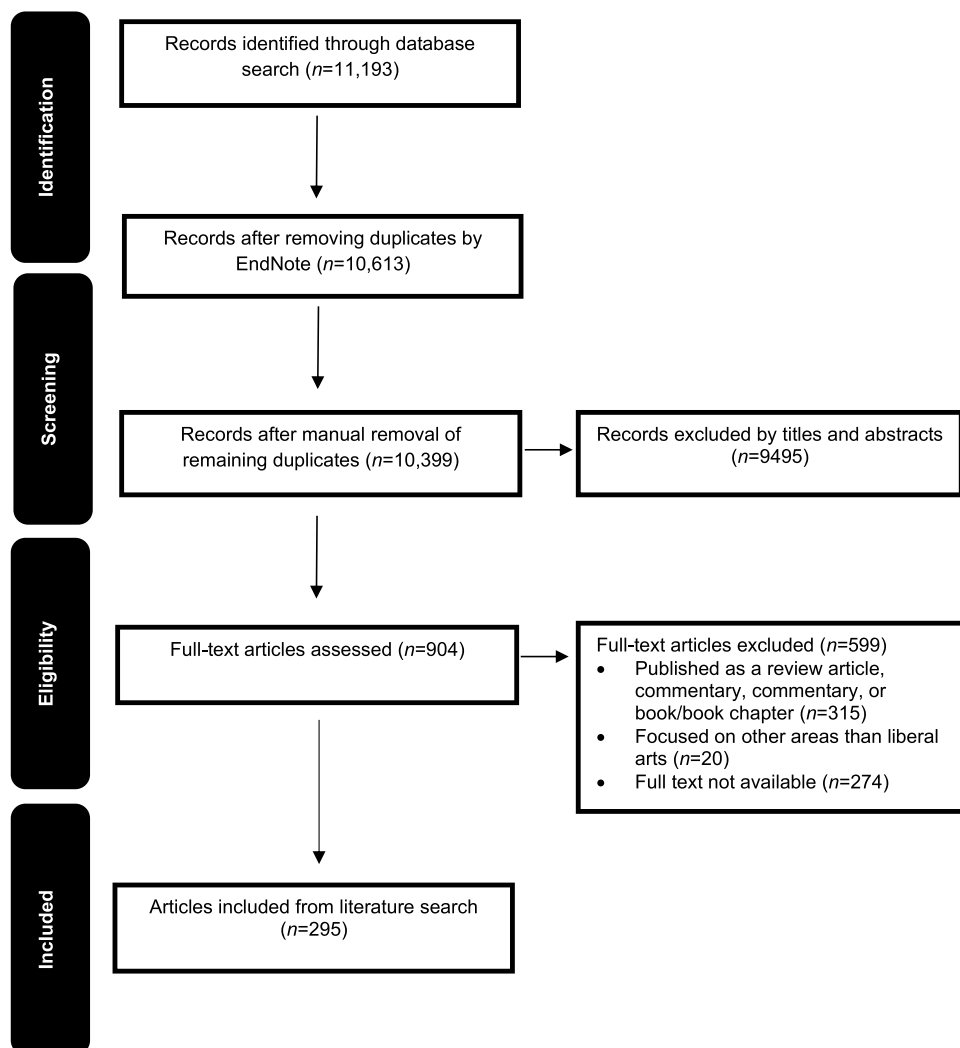


Fig. 1. Flow diagram for the systematic scoping review process.

3.3. Empirical evidence to facilitate the development of liberal arts education

There are several issues regarding the development of liberal arts education addressed in the studies between 1970 and 2023. The evolution of liberal arts education began with the recognition of administrative structures that support liberal-general education amidst increasing vocational pressures, emphasizing its role in producing well-rounded graduates (Stein, 1970). The integration of liberal arts education with other fields also started in early years of the development as we found the pioneering programs that incorporated liberal arts into public relations and pre-professional trainings (Borzak & Hursh, 1977; Wilcox, 1975). Over time, the development of liberal arts education has been shaped by three key trends.

3.3.1. Curriculum design reform

During the 1970s - 1980s, early discussions focused on revitalizing humanities and liberal arts, but structural changes were limited. Over time, there was an increasing emphasis on practical and critical thinking skills as a response to globalized job markets. By the 2000s, global perspectives gained prominence, with universities incorporating international case studies and exchange programs. In the past two decades, adaptation across cultural contexts became more significant, integrating diverse pedagogical methods and emphasizing experiential learning to address social issues. We identified significant curriculum changes in liberal arts education, including;

Emphasis on Practical and Critical Skills: While there is a growing emphasis on equipping students with practical skills directly applicable to the job market (Gannaway & Sheppard, 2017; Gersten, 2012; Hemmy & Mehta, 2021; Simsek & Hacifazlioglu, 2012; Stebleton et al., 2020; Wenzlau, 1983; Zeid et al., 2015), the intrinsic benefits of a liberal arts education, such as the development of critical thinking and communication skills, remain highly valued (Carver & Harrison, 2015). These skills are essential for personal growth and civic engagement (Smith, 2014). There is a continued emphasis on fostering critical thinking, ethical reasoning, and civic consciousness among students (Carver & Harrison, 2015).

Revitalizing Humanities and Arts: There is a renewed focus on the humanities and arts within liberal arts education, addressing their marginalization and promoting their importance in fostering critical and creative thinking (Carver & Harrison, 2015; Qiao, 2018).

Global and Inclusive Perspectives: Efforts to update and reform curricula include integrating various subjects into the liberal arts curriculum. This includes an emphasis on incorporating global perspectives, non-Western traditions, and transcultural competence to respond to the need for a more inclusive and diverse educational framework (Cook, 2014; Jiang, 2012; Kang, 2018; Krupczak et al., 2006; Penprase, 2021; Scott, 2014; Sklad et al., 2016; Van Der Wende, 2013).

Adaptation across Cultural Contexts: Additionally, there is an expansion and adaptation of liberal arts education in diverse cultural settings (Krupczak et al., 2006; Liu & Lye, 2016; Madsen, 2020; Miller & Holliday-Millard, 2021; Mino, 2021; Ning, 2015), including predominantly Muslim societies and post-Soviet regions (Baker, 2011; Baker & Thompson, 2010; Rostron, 2009; Titarchuk, 2011). This development seeks to make liberal arts education relevant and accessible worldwide.

3.3.2. Structural integration with professional and technical education

In the 1970s-1980s, liberal arts and technical education were largely separate. However, early discussions on interdisciplinary approaches began, leading to initial attempts to blend professional and liberal arts education. By the 2000s, the integration of digital literacy and technology-driven curricula became more prominent. An expansion of interdisciplinary programs, vocational integration, and service-learning initiatives started to gain attention in 2010s. Over the past decade, hybrid education models, combining liberal arts with technical and vocational training, have become widespread. We identified structural

efforts to integrate liberal arts with vocational and professional fields, including;

Blending Liberal Arts with Professional Studies: Liberal arts education is sometimes viewed as offering 'luxury skills' that are not essential for most careers, which undermines its perceived value in practical, everyday contexts (Bogolepova & Malkova, 2018; Fludernik, 2005; Stebleton et al., 2020). To address this, there are increasing efforts to blend liberal arts education with professional and technical studies, such as engineering, computer science, and business (Arthurs, 1981; Baker & Carlson, 2018; Bakilapadavu & Shekhavat, 2013; Bruce & Freund, 2008; Bucciarelli & Drew, 2015; Dominguez et al., 2015; Flath, 2015; Martinez et al., 2007; Needle et al., 2007; Oudshoorn et al., 2020; Saxon, 1985; Schubert & Ep, 1997; Sen et al., 1996; Sinclair, 2016; Sjrursen, 2006; Tenenberg & McCartney, 2007; Walker & Schneider, 1996; Warren, 1998; Wilson, 2015; Winebrake, 2015; Wits et al., 2014; Wunsch, 1998). This includes emphasizing the integration of entrepreneurship, management, and practical skills into liberal arts curricula to enhance employability, providing students with a well-rounded education that includes both critical thinking and practical skills (Baker & Powell, 2019; Cameron et al., 2019; Rennie, 2008; Robinson, 2013).

Incorporating Technology and Digital Literacy: There is also a growing focus on integrating technology studies, digital humanities, and digital tools within liberal arts education to address the demand for technological literacy in a digital age (Jones & Kumar, 1991; Klein & Balmer, 2006; Locke, 2017; Proctor et al., 2015; Pyskhin & Assoc Comp, 2017; Weaver, 1987; White, 2017).

Interdisciplinary and Vocational Integration: Adapting liberal arts education to meet market demands and improve employability involves incorporating vocational preparation, entrepreneurship, and workplace relevance into liberal arts programs (Bates et al., 2014; Bergquist et al., 2020; Robinson, 2013; Wenzlau, 1983). Promoting interdisciplinary education and collaboration across disciplines enhances comprehensive understanding and innovation, integrating subjects such as statistics, economics, and public history into liberal arts education (Hudson & Hinman, 2017; Iversen, 1985; Moore, 1998; Mountrouidou et al., 2018; Nae, 2017; Pfnister, 1984).

Service-Learning and Community Engagement: Active learning, practical engagement, and the adoption of digital pedagogy and online education methods are also being implemented to enhance learning experiences and accessibility (Proctor et al., 2015; Roth, 2013; White, 2017). Development of service-learning models and community engagement initiatives are being pursued to enhance practical and societal relevance (Christie et al., 2017; Ming et al., 2009; Painter & Howell, 2020; Painter & Pixel, 2019).

3.3.3. Shifts in education priorities

Until 1990s, liberal arts remained central to higher education, with holistic learning seen as vital. However, economic factors gradually influenced policy, leading to an early shift toward science, technology, engineering, and mathematics (STEM) education. From the 2000s onward, a market-driven focus became more dominant, prioritizing practical education over holistic approaches. In response to concerns about the decline of liberal arts, efforts to reintegrate it within STEM frameworks emerged. In the 2020s, renewed calls for balancing liberal arts with practical skills have emphasized interdisciplinary education. We observed broader educational trends that reflect institutional and policy-level shifts, including;

STEM and Market-Driven Focus vs. Liberal Arts: there has been a noticeable trend where STEM disciplines are prioritized over liberal arts (Bruer & Warren, 1981; Montés et al., 2023; van der Wende, 2011; Weaver, 1987). This shift reflects a broader societal and educational emphasis on research, practical skills, and marketable competencies (Claus et al., 2018; Robinson, 2013). Higher education institutions are increasingly valuing research outputs over teaching excellence, which can detract from the holistic and teaching-focused mission of liberal arts colleges (Cobb, 2015; Kimball, 2014).

Practical Education over Holistic Learning: There is a growing preference for education that provides directly marketable skills, often at the expense of holistic learning experiences that liberal arts traditionally offer. This trend reflects the increasing importance placed on immediate employability (Cameron et al., 2019). Practical education is being favored over philosophical and theoretical learning, driven by the demand for education that directly translates to job skills and economic productivity (Smith, 2018).

3.4. Key areas of focus in liberal arts education

We found several areas of focus within the development of liberal arts education (Table 1). As liberal arts education has broadened its scope to include practical and market-oriented skills while maintaining its foundational emphasis on critical thinking, cultural awareness, and holistic learning. By incorporating diverse fields such as STEM, business, and health, liberal arts education aims to remain relevant and adaptable to modern societal and workforce demands (An et al., 2020; Badua, 2015; Becker, 2015; Beilby, 1992; Bjelland, 2004; Chatterjea, 2020; Cohen et al., 2014; Congdon, 2000; Hemmy & Mehta, 2021; Hill et al., 2012; Montés et al., 2023; Piergiovanni & Ieee, 2011; Schwerin, 1983; Sen et al., 1996; Sinclair, 2016; Sjursen, 2006). This interdisciplinary approach not only enriches the educational experience but also prepares students for a complex and interconnected world (Bergquist et al., 2020).

3.5. Challenges in liberal arts education

Liberal arts education is often perceived as outdated, irrelevant, and disconnected from contemporary societal needs and technological advancement (Arcilla, 2014; Balmer, 2006; Bauman, 1987; Haberberger, 2018; Kaplan, 1992). Traditional liberal arts education faces significant gaps in its relevance and ability to meet contemporary societal demands, creating a disconnection between what is taught and the skills required in today's world (Haberberger, 2018; Kaplan, 1992).

Moreover, liberal arts education is frequently dominated by Western educational models, which may not always be applicable or relevant in non-Western contexts (Cheng & Zhang, 2020; Cook, 2014; Godwin,

Table 1

Areas of focus within liberal arts programs and other disciplines integrated within liberal arts education.

Discipline	Subject
<i>Key areas of focus within liberal arts programs</i>	
Education and Pedagogy	diverse teaching methods, faculty development, innovative pedagogy service learning, practical arts
Cultural and Philosophical	multiculturalism, cosmopolitanism, Confucianism, religious studies
Dimensions	religious studies
Curricula and Rhetoric	rhetorical skills, foreign languages, critical thinking
History and Tradition	historical perspectives
<i>Other disciplines focused in liberal arts programs</i>	
Market Economy and Business	management education, market economy principles, business education, entrepreneurship, finances, accounting
Sciences and Technology	STEM fields, computing, technology, programming languages, information science, immunology, machine learning, computational physics, environmental education, data science, geography
Humanities and Social Sciences	humanities, political science, social sciences, history, philosophy, emotional intelligence, peace and conflict studies, financial literacy, labor studies
Engineering and Applied Sciences	engineering, applied mathematics, applied physics
Health and Wellbeing	public health, medical education, physical education, cybersecurity, spiritual and moral education, emotional and mental wellbeing
Arts and Music	music education, graphic design, and other creative disciplines

Note: STEM = science, technology, engineering and mathematics.

2015; Jiang, 2012; Kang, 2018). This dominance can limit the global adaptability and acceptance of liberal arts curricula. Within the broader educational landscape, liberal arts programs and institutions are often marginalized and neglected, posing a significant challenge for advocates of liberal arts education (Qiao, 2018).

There is also a need to address the tension between traditional liberal arts values and modern educational demands (Gersten, 2012; Hadzi-georgiou, 2019; Hoskins & Brown, 2017; Pangle, 2013; Penprase, 2021; Pushkina, 2020). This involves preserving the holistic educational goals of liberal arts while adapting to contemporary contexts (Ivanova & Sokolov, 2015; Kochhar-Lindgren, 2013; Kovacevic, 2022). Efforts are being made to tackle the financial and organizational challenges faced by liberal arts colleges, including exploring sustainable models and learning organization principles to ensure the viability of these institutions (Baker & Baldwin, 2015; Burrell, 2008; Finkelstein et al., 1984; Neely, 1999; Paino, 2014). Additionally, addressing market-driven pressures and economic sustainability issues is crucial for the continued relevance and survival of liberal arts education (Gannaway & Sheppard, 2017; Goodwin, 2019; McPherson & Schapiro, 1999; Neely, 1999; Paino, 2014).

3.6. Recommendations for future direction

Based on the included literature, several studies provide recommendations for strengthening liberal arts education.

3.7. Restructuring programs for multidisciplinary and relevance

Colleges and institutions should restructure their programs to integrate liberal arts with professional and technical disciplines, ensuring relevance in a competitive job market (Ishii, 2017; Kushner, 1999; Oudshoorn et al., 2020). Studies highlight successful models where liberal arts education is embedded in business and engineering curricula, leading to enhanced critical thinking, innovation, and adaptability among students (Badua, 2015; Barke et al., 2001; Kallenberg, 2015; Kushner, 1999). Additionally, incorporating scientific content into liberal arts curricula fosters a holistic educational experience, preparing students with essential competencies for a globalized world (Burns & Natale, 2020; Domcekova, 2010; Kiniger-Passigli, 2021).

3.8. Enhancing career preparation and industry collaboration

To be compatible in real-world contexts, liberal arts institutions should enhance career preparation efforts by strengthening connections with employers, incorporating internships, and aligning coursework with evolving labor market needs (Carson, 2022; Freeland, 2009; Hemmy & Mehta, 2021). This includes establishing cooperative education programs and industry partnerships to provide students with practical work experience (Barber & Battistoni, 1993; Handler et al., 2016), developing career mentoring networks, where alumni and professionals offer guidance tailored to liberal arts graduates (Liu & Lye, 2016), and expanding internship opportunities with organizations that value interdisciplinary skills such as media and nonprofit sectors (Cameron et al., 2019; Carson, 2022). Moreover, professional success should not be measured solely in economic terms. Studies emphasize the importance of broader outcomes, such as personal growth, critical thinking, adaptability, service learning, and social engagement, which should be reflected in institutional policies and program design (Ishii, 2017; Telling, 2018).

Faculty Development and Technological Integration

Faculty development should be tailored to enhance interdisciplinary teaching methods and technological integration in liberal arts programs (Baker et al., 2018). Studies recommend offering professional development workshops on integrating digital literacy and tools into curricula (Locke, 2017; Proctor et al., 2015; White, 2017), expanding the use of blended and online learning models to complement traditional classes

(Abrossimova et al., 2020), and designing inclusive digital education to accommodate individuals with disabilities and those seeking flexible learning options (Godwin, 2015). Additionally, colleges should offer integrated liberal arts courses with dedicated full-time professors and promote humanist learning to develop well-rounded individuals (An et al., 2020).

3.9. Preserving the identity and relevance of liberal arts institutions

Recognizing the historical and cultural foundations of liberal arts is essential to help navigate contemporary challenges and maintain their distinctive identities. Institutions should leverage their traditions to reinforce their unique educational mission, while adapting to emerging societal and technological demands. Key strategies include promoting service-learning initiatives that link liberal arts education to community engagement, and fostering global education programs, such as international exchange partnerships, to enhance cross-cultural competencies (Kang, 2018; Painter & Howell, 2020; Painter & Pixel, 2019).

4. Discussion

This study examines the historical development and evolving trends in liberal arts education from a global perspective, focusing on changes from the 1970s to 2023. Through a systematic review of the literature, three distinct phases in the evolution of liberal arts education have been identified: its philosophical foundations, the shift toward professional and market-driven demands, and a recent resurgence integrating traditional values with contemporary skills.

Initially, liberal arts education was deeply rooted in democratic values, intellectual development, and humanistic principles. The U.S. model served as a global benchmark, emphasizing civic consciousness, critical thinking, and a well-rounded education. As higher education began to adapt to professional and vocational demands, especially in the latter half of the 20th century, liberal arts curricula expanded to include practical and career-focused skills, while still maintaining a commitment to the humanities. This transition is especially notable in the U.S., where research universities and vocational institutions emerged, yet the country preserved the core principles of liberal arts education.

Since the 1970s, globalization has played a crucial role in shaping educational policy and the liberal arts curriculum on a global scale. The United States, as a leading political and economic power, has been instrumental in influencing the development of liberal arts education worldwide (Hopkins & Wallerstein, 1982; Palmadessa, 2017; Wallerstein, 1976). The U.S.-based liberal arts model, which emphasizes democratic values, civic consciousness, critical thinking, and capitalist ideals, has become a guiding framework for liberal arts programs globally.

Despite global trends shifting toward market-driven educational approaches, particularly in Western Europe, the United States maintained a strong commitment to the humanities and the arts. The U.S. preserved the core intellectual and philosophical values of liberal arts education, even as vocational and research institutions emerged. This commitment allowed the American liberal arts model to stand apart as a beacon, inspiring institutions worldwide to uphold these foundational ideals.

Studies from the 1970s highlight liberal arts education as an interdisciplinary bridge, integrating subjects across the humanities and sciences (Medve & Pugliese, 1987; Mitcham, 1986; Norman, 1987; Saxon, 1985). This integration sought to close the divide between these fields, which had widened since the industrial era's emphasis on scientific and technological advancement (Boutser & Karstens, 2015). Researchers emphasized the importance of a humanistic focus, arguing that liberal arts education not only prepared students for the workforce but also cultivated informed, responsible citizens (Nuttall, 1980). This focus on citizenship, rooted in the preservation of classical Greco-Roman teachings and civic virtues, was particularly strong in the U.S. (Lane, 1987),

where it countered the growing influence of neoliberal educational trends before the 1980s.

Since the 1980s, neoliberal economic priorities have reshaped higher education globally (Davies & Bansel, 2007; Hill & Kumar, 2009; Lazer, 2010), with an increasing emphasis on job-market alignment, especially in science and technology fields (Arai et al., 2007; Geiger, 2015). This shift has pressured liberal arts education to adapt, emphasizing interdisciplinary skills and practical outcomes that support economic growth.

In semi-peripheral countries like China, India, Hong Kong, and Turkey, liberal arts education reflects both colonial legacies and contemporary global demands (Enslin, 2017; Hayward, 2004). Initially modeled after colonial systems to train local elites in governance and administration, it has since evolved to align with economic growth and global integration. These nations now emphasize liberal arts curricula in high-demand fields such as science, technology, and business, balancing traditional academic foundations with modern market needs. For instance, China's Duke Kunshan University combines liberal arts with a focus on global competencies, preparing students for careers in science and technology while encouraging interdisciplinary skills (Simon, 2022). India's Ashoka University similarly offers a market-relevant liberal arts curriculum that blends critical thinking with professional skills, equipping students to navigate diverse career paths (Chakraborty et al., 2021). These examples highlight how Asian institutions adapt liberal arts education to align with global labor markets, while still attempting to balance interdisciplinary learning with professional relevance.

However, this market-driven focus comes at a cost. In many emerging economies, indigenous values and cultural traditions are increasingly marginalized in mainstream curricula. The broader humanistic goals of liberal arts—such as critical thinking, civic engagement, and ethical reflection—are similarly overlooked. The adoption of the American-style liberal arts model in non-Western settings often privileges Western social structures and cultural norms as universal benchmarks, positioning them as ideals to be emulated by colonized and developing societies. This perspective can hinder learners from engaging deeply with their own cultural heritage, pride, and histories (Mansour, 2018).

Western liberal arts models frequently prioritize skills and knowledge aligned with economic development, sometimes at the expense of local relevance. In many emerging economies, the urgent drive for economic growth and job creation has pressured higher education systems to align with market demands, compelling liberal arts programmes to emphasize vocational and technical skills over their traditional focus on humanistic values, critical thinking, and civic engagement. As a result, liberal arts programmes in non-Western contexts increasingly face declining support amid the shift toward market-oriented education. While such shifts may enhance employability, they risk diminishing the cultural richness and educational diversity unique to non-Western societies (Jung et al., 2016). This tension underscores the need to balance global competitiveness with the preservation and integration of local educational and cultural identities.

Yet, this trend presents an opportunity for reimagining liberal arts through context-specific models that incorporate local histories, cultural practices, and interdisciplinary learning frameworks. Rather than replicating Western templates, curricula should be co-designed with local communities and industries to align humanistic education with regional priorities such as social equity, environmental sustainability, and digital inclusion. Partnerships between liberal arts institutions and technical/vocational programs can also help bridge perceived gaps between employability and critical thinking. These innovations may offer a pathway to re-integrate liberal arts into national development agendas while retaining cultural relevance.

Liberal arts education is undergoing a significant evolution, adapting its foundational humanistic values to meet the demands of the Fourth Industrial Revolution and the post-pandemic era. The confluence of technological advancements, societal polarization, and global

disruptions like COVID-19 has accelerated the need for interdisciplinary approaches that integrate critical thinking with practical, digital, and collaborative skills (Chaka, 2022; Montés et al., 2023; Xu et al., 2018).

The pandemic highlighted vulnerabilities in traditional education systems, emphasizing the necessity for flexibility, resilience, and digital transformation in higher education. Institutions have increasingly adopted hybrid and online learning platforms, leveraging artificial intelligence and digital tools to enhance accessibility and foster global connectivity (Yamada, 2021). However, this digital shift has also underscored issues of equity, with disparities in access to technology and the internet deepening educational divides, particularly in underserved regions (Philbeck & Davis, 2018).

In response to these challenges, the STEAM (Science, Technology, Engineering, Arts, and Mathematics) model has gained prominence as a framework for fostering creativity and innovation. This approach, blending technical expertise with the arts, addresses complex global challenges by cultivating holistic problem-solving abilities. In Asia, this model has seen growing adoption. For example, Singapore's Yale-NUS College combines liberal arts with science and technology to foster innovative thinking and to prepare students for diverse roles in a knowledge-driven economy (Lewis, 2024).

Moreover, societal polarization—exacerbated by digital echo chambers and misinformation—has made the teaching of ethics, civic engagement, and cross-cultural understanding more critical than ever. Liberal arts education, with its focus on fostering empathy, communication, and ethical reasoning, is uniquely positioned to address these issues, equipping students with the skills to navigate and mediate societal divisions.

As the Fourth Industrial Revolution continues to redefine the global economy, liberal arts institutions face the dual challenge of preserving their traditional values while adapting to a rapidly changing landscape. By embracing digital transformations, interdisciplinary education, and an emphasis on global and societal relevance, liberal arts programs can remain vital contributors to sustainable development and social cohesion.

Liberal arts education is essential for cultivating critical thinking, creativity, interdisciplinary knowledge, cultural literacy, and resilience—skills necessary for today's dynamic world (Altbach et al., 2009; Gleason, 2018). Research highlights that integrating liberal arts with societal issues such as multiculturalism, cybersecurity, environmental sustainability, and public health equips students to address complex global challenges (Miller & Holliday-Millard, 2021; Mondschein, 2020; Mountrouidou et al., 2018; Ndura & Dogbevia, 2013; Painter & Howell, 2020; Robinson et al., 2018; Simmons, 2018). Studies suggest that further development in these areas can enhance students' adaptability and problem-solving skills, making them well-prepared for diverse roles in an evolving society. This evidence points to the untapped potential of liberal arts education in fostering informed, flexible, and socially responsible individuals.

The evolution of liberal arts education globally reflects not only the pressures of the Fourth Industrial Revolution but also a re-evaluation of post-colonial educational structures. Developing countries have historically adopted Western educational paradigms, often prioritizing Western methodologies while sidelining indigenous knowledge. This has created an imbalance, limiting the integration of local cultural perspectives in science, technology, and the humanities. Such frameworks struggle to address complex challenges like rapid population growth and societal shifts (Jung et al., 2016). Addressing this imbalance through a more inclusive approach could enhance liberal arts education's capacity to tackle global and local issues effectively.

Amid global neoliberal influences, non-Western nations are increasingly reclaiming their indigenous cultures and educational systems, previously marginalized by Western dominance (Enslin, 2017; Jiang, 2015). This "East-meets-West" dynamic sees Asian countries adopting Western liberal arts models, especially the American framework, while tailoring them to fit local contexts. Research highlights this

integration in India, where institutions blend indigenous values with contemporary liberal arts. Similarly, in post-colonial Hong Kong, liberal arts education has evolved to address both global demands and local cultural identities. Liberal arts education has also evolved within Islamic societies, China's post-revolutionary educational landscape, and in nations like Qatar, Turkey, Singapore, and Korea (An et al., 2020; Estad et al., 2014; Mino, 2021; Penprase, 2021; Rostron, 2009; Simsek & Hacifazlioglu, 2012; Struss, 2013; Sun, 2018; Wang & Tian, 2019; Yuksel, 2011), where Western models are adapted to align with local cultural and ideological contexts (Mou, 2024; Mou et al., 2023). This fusion demonstrates how Asian education systems can reconcile cultural heritage with the demands of a global economy, fostering a more holistic, context-sensitive approach to liberal arts.

While integrating indigenous knowledge and culturally rooted educational frameworks provides an opportunity to challenge Western-centric paradigms, it also poses significant risks. Scholars have warned that such approaches, if not carefully implemented, may become politicized—particularly in national contexts where education is used to promote dominant ideologies (de Wit & Altbach, 2020; Marginson, 2022; Mino, 2021). In India, for example, innovative liberal arts programs coexist with efforts to align curricula with Hindu nationalist narratives (Mino, 2021). Similarly, in Turkey, state-led educational reforms have invoked cultural revivalism to justify conservative and nationalist agendas (Alemdaroğlu, 2022; Tutkal, 2022). These cases illustrate the double-edged nature of culturally embedded education, while it can promote decolonization and inclusivity, it may also be co-opted to reinforce ideological conformity.

5. Recommendations for policymakers and educators

We propose a 21st-century 'hybrid liberal arts model' aimed at creating a globally relevant education system that meets the demands of the Fourth Industrial Revolution and the post-pandemic era. This model is informed by existing literature and synthesizes key insights from prior studies on liberal arts education, labor market demands, and culturally responsive pedagogy, and it incorporates four essential dimensions:

- American-Style Liberal Arts:** Cultivate humanistic, critical thinkers who excel in collaboration and are equipped to address complex global challenges. This foundation encourages adaptability and innovation, skills vital in a rapidly evolving technological landscape (Freeland, 2009; Nussbaum, 2002; Peoples, 2015).
- Market-Driven Skills Integration:** Emphasize competencies in communication, leadership, entrepreneurship, and technology, preparing students for a dynamic job market while fostering informed global citizenship. By aligning with labor market needs, this dimension ensures that liberal arts graduates are competitive in an increasingly automated and tech-driven world (Baker & Powell, 2019; Carson, 2022; Gasman & McMickens, 2010; Goodwin, 2019; McPherson & Schapiro, 1999; Neely, 1999; Simsek & Hacifazlioglu, 2012; Telling, 2018).
- Incorporation of Indigenous and Diverse Perspectives:** Integrate local cultures and diverse viewpoints to foster a holistic, socially responsive education that respects societal diversity. This inclusion strengthens cultural competence and social responsibility, equipping graduates to navigate and lead in multicultural environments (Cheng, 2017; Kochhar-Lindgren, 2013; Liu & Lye, 2016; Mino, 2021; Ning, 2015).
- Post-Pandemic Education Strategies:** prioritize hybrid learning platforms integrating online and offline education to ensure equitable access and reduce educational inequalities. Resilience programs promoting adaptability and emotional intelligence are also essential for student well-being (Chaka, 2022; Jung & Mok, 2023; Locke, 2021; Montés et al., 2023).

The hybrid liberal arts model is particularly promising for post-

colonial, non-Western nations where education systems are evolving to harmonize cultural heritage with the demands of a globalized economy. In regions like Asia and the Middle East, liberal arts frameworks are emerging that blend critical thinking with market-relevant skills and cultural sensitivity—addressing both local needs and global pressures of the Fourth Industrial Revolution. Unlike Western liberal arts systems, which often struggle to adapt to rapid technological and economic shifts, these culturally resonant and economically practical frameworks align well with modern complexities.

However, the proposed hybrid model must also include safeguards to uphold academic freedom, promote epistemic diversity, and advance social equity. One example is Yale-NUS College in Singapore, a partnership between Yale University and the National University of Singapore. The college’s curriculum merged Eastern and Western traditions and emphasized cross-cultural dialogue, yet its recent closure has raised concerns about academic autonomy and the long-term viability of such models (Lewis, 2024). Japan’s International Christian University (ICU) presents another example: established in the post-war era, ICU combines liberal education with peace-oriented values and is often cited as a rare case in East Asia where liberal education is consciously protected from ideological capture. However, its model remains relatively elite and has not been widely adopted across Japan’s public education sector (Jung, 2016; Mou, 2021). These examples underscore both the potential and the limitations of implementing hybrid liberal arts models in non-Western contexts. A structured policy framework aligning the recommendations of the proposed model with specific stakeholders, regions, and educational goals is presented in Table 2.

6. Action steps for policymakers

- 1. Legislation:** Pass policies mandating the integration of critical thinking, cultural knowledge, and tech skills in all higher education curricula.

- 2. Funding Allocation:** Allocate government and international funds to universities for faculty training, curriculum redesign, and hybrid learning infrastructure.
- 3. Partnerships:** Encourage collaborations between universities, private sectors, and cultural institutions to balance global competitiveness with local identity.
- 4. Monitoring and Evaluation:** Create task forces to evaluate the implementation and outcomes of these recommendations every two years.

For educators and policymakers, this policy framework provides a forward-thinking strategy and a clear roadmap to align liberal arts education with global trends, market demands, and local cultural contexts. By adopting this balanced approach, non-Western nations can establish an education system that fosters critical thinking and professional skills while respecting and integrating local cultural heritage. This positions these nations to take the lead in developing a globally relevant education system capable of addressing complex contemporary challenges.

7. Strengths and limitations

The strength of this review lies in its systematic methodology. First, we conducted an extensive database search using relevant keywords to identify eligible studies. Second, we extracted comprehensive information from each study, allowing for a detailed interpretation of existing evidence on the global development of the liberal arts education. Finally, our study selection strategies ensured the inclusion of diverse study designs and publication types. These methods provide a unique perspective on the historical evolution of liberal arts and prospects for future education reforms. However, there are some limitations to this review. Our focus on English-language sources may have led to the omission of relevant studies published in other languages. Additionally, we may have also missed some studies that were not indexed in the selected databases. Furthermore, given the large number of studies

Table 2
Policy Framework for the Hybrid Liberal Arts Model.

Recommendation	Specific Actions	Stakeholders	Target Regions	Educational Goals
1. American-Style Liberal Arts Foundations	- Develop interdisciplinary curricula focusing on humanities, critical thinking, and global problem-solving.	Ministry of Education, University Boards	Asia, Middle East	Foster critical thinking and global adaptability.
	- Train educators to incorporate active learning, problem-solving, and collaboration into teaching methods.	Teacher Training Institutions	Asia, Middle East	Equip students with 21st-century skills for innovation.
2. Market-Driven Skills Integration	- Embed entrepreneurship, leadership, and digital literacy courses in liberal arts programs.	Universities, Private Sector	Global	Align education with labor market and technological demands.
	- Establish partnerships with industry to create internships and co-op programs for practical experience.	Corporations, NGOs, Local Governments	Global (especially urban centers in developing countries)	Enhance employability and workforce readiness for graduates.
	- Fund research initiatives linking liberal arts with applied sciences and emerging tech (AI, robotics).	Research Councils, International Development Agencies	Global	Innovate at the intersection of liberal arts and market-relevant technologies.
3. Incorporation of Indigenous Perspectives	- Design culturally inclusive curricula that integrate indigenous knowledge and local histories.	Curriculum Development Committees, Local NGOs	Asia, Middle East	Strengthen cultural identity while addressing global challenges.
	- Include language preservation and indigenous art programs in liberal arts education.	Linguistic Experts, Cultural Institutions	Asia, Middle East (especially regions with indigenous populations)	Promote linguistic and cultural diversity in education.
	- Host cross-cultural workshops to train faculty in incorporating local and global perspectives.	Educational NGOs, Regional Networks	Asia, Middle East (especially regions with indigenous populations)	Prepare educators to teach inclusively and sensitively.
4. Post-Pandemic Education Strategies	- Expand access to hybrid learning platforms integrating online and offline education.	Government IT Departments, Universities, Tech Companies	Global	Ensure equitable education delivery in post-pandemic scenarios.
	- Develop resilience programs that teach students adaptability and emotional intelligence.	Mental Health Experts, University Programs	Global	Support mental well-being and flexibility for uncertain futures.
	- Establish regional funds for pandemic-affected students to access higher education.	International Organizations, National Ministries	Asia	Reduce inequality in education access post-pandemic.

included in the review, we focused on providing general interpretations, which limited our ability to conduct an in-depth assessment of each study. One limitation is the complex and context-dependent nature of culturally embedded liberal arts education, which in some cases—such as India and Turkey—has intersected with nationalist or ideological agendas. This underscores the importance of context-sensitive strategies that safeguard academic freedom and institutional autonomy. Further research to explore the evolving relationship between liberal arts education and political power is needed, particularly in Asia. Future reviews could also benefit from incorporating multilingual sources and focusing on specific regions, disciplines, or institutional models to build a more comprehensive view and nuanced understanding of global liberal arts education.

8. Conclusion

Liberal arts education has continually evolved under the transformative pressures of political, social, and economic change. These forces have reshaped its purpose, pushing it to maintain its multidisciplinary foundations while aligning with shifting global priorities. Historically, liberal arts has adapted to balance humanistic values with the demands of neoliberal economies. In the context of the Fourth Industrial Revolution and the aftermath of the COVID-19 pandemic, liberal arts is once again at a crossroads—repositioning itself to address urgent needs for social inclusion, multicultural awareness, digital literacy, and environmental sustainability.

This study has traced the global evolution of liberal arts education, emphasizing its flexibility and capacity to adapt to complex contemporary challenges. The proposed hybrid model not only highlights the value of integrating traditional liberal arts foundations with modern competencies but also offers a practical framework for educational innovation across diverse disciplines. Importantly, this model recognizes that adaptation must occur within systems that are often resistant to change. Institutional inertia, rigid accreditation structures, and stakeholder skepticism—particularly regarding the employability of liberal arts graduates—remain significant barriers. Overcoming these challenges requires strategic engagement with policy actors, university leadership, and employers to co-design curricula that align with both cultural contexts and labor market needs.

Moreover, as technology becomes increasingly embedded in educational systems, future iterations of liberal arts must grapple with digital integration—not simply as a tool for delivery, but as a transformative component of teaching and learning. This raises important questions around access, equity, and pedagogy that merit further exploration.

Our findings contribute to the global education literature by offering a policy-oriented framework that identifies relevant stakeholders, regional conditions, and educational goals. This framework integrates critical thinking, professional and digital competencies, and cultural relevance, reinforcing the role of liberal arts in shaping adaptable, socially engaged, and globally aware graduates.

For future research, we recommend more empirical, cross-national studies—particularly in non-Western contexts—to examine how liberal arts education is being localized and how its learning outcomes are being redefined in response to cultural, technological, and economic shifts. Such studies should also evaluate the feasibility and impact of interdisciplinary liberal arts programmes amid institutional constraints and evolving global labor markets.

CRedit authorship contribution statement

Nattanee Satchanawakul: Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Conceptualization. **Nucharapon Liangruenrom:** Writing – review & editing, Writing – original draft, Visualization, Methodology, Formal analysis, Data curation.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

Acknowledgments are due to the Office of the Permanent Secretary, Ministry of Higher Education, Science, Research and Innovation and Mahidol University, for their financial support in this research endeavor, to Assistant Professor Aphiwit Liang-Itsara of the Faculty of Liberal Arts at Mahidol University, Thailand and Napaphat Satchanawakul of United Nations Economic and Social Commission for Asia and the Pacific, Thailand. The perspectives presented in this paper are solely those of the authors, who report no conflicts of interest concerning this manuscript.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.ijedro.2025.100482.

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