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Higher Education Strategies for Enhancing the Employability of International Students: A Systematic Review of the Postpandemic Era

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ABSTRACT

This study investigates the role of higher education strategies in enhancing the employability of international students in the postpandemic era, employing the USEM (understanding, skills, efficacy beliefs, metacognition) as a theoretical framework. By focusing on targeted interventions, this research explores how higher education institutions address key employability dimensions to support students' academic, professional, and personal development. Using a systematic literature review approach guided by the PRISMA framework, the study included 23 publications from 2020--2024. The findings highlight the effectiveness of strategies such as culturally responsive reflective practices, work-integrated learning (WIL), tailored career support, and curriculum-embedded skill development. These approaches enhance students' abilities, equipping them with the ability to succeed in competitive and diverse labor markets. By providing actionable insights, this research enriches the understanding of employability strategies within the USEM framework and offers valuable recommendations for institutions and policymakers to design culturally inclusive, evidence-based career interventions.

Keywords: International students, Employability, USEM, Higher education

INTRODUCTION

The landscape of higher education has been significantly transformed by globalization and internationalization trends, leading to a marked increase in the number of international students—defined as "those students who left their country of origin and moved to another country for the purpose of study" (OECD, 2023). This phenomenon is driven by various factors, including the pursuit of quality education, cultural exchange, and the desire for better employment opportunities postgraduation (Butrym, 2020; Worae & Edgerton, 2023). For these students, employability—understood as "the set of achievements—skills, understandings, and personal attributes—that make graduates more likely to gain employment and be successful in their chosen occupations" (Yorke, 2006)—has become a critical concern.

The postpandemic era has introduced new complexities to this scenario, as international students now face heightened challenges in securing employment. These challenges include shifts in labor market demand, uncertainties in the working environment, and issues related to skills matching (Dodd et al., 2021; Pal, 2022). For example, remote work has become increasingly prevalent, particularly in response to the COVID-19 pandemic, presenting both opportunities and challenges for organizations (Ferreira et al., 2021). The evolving job landscape demands a future-ready workforce equipped with digital literacy, learnability, and soft skills such as creativity and problem solving (Jagannathan et al., 2019).

The COVID-19 pandemic has exacerbated existing barriers to employability for international students, such as limited access to job markets, reduced internship opportunities, and increased competition for available positions (Firang & Mensah, 2022; Indumathi et al., 2021). Research indicates that many international students experience significant stress related to employment uncertainty, which can adversely affect their academic performance and overall well-being (Almomani et al., 2021; Pal, 2022). Furthermore, the mismatch between the skills acquired during their studies and the competencies sought by employers has become more pronounced, necessitating a reevaluation of educational strategies aimed at enhancing employability (Fakunle, 2021; Okolie et al., 2019). In addition, studies on African students in Kazakhstan highlight visitation restrictions and cultural adaptation barriers (Hajar et al., 2024), whereas research in China reveals unique linguistic and institutional hurdles (Dai & Pham, 2024). As Ting et al. (2024) reported, the COVID-19 pandemic has significantly impacted international students' academic experiences, requiring universities to provide cultural, academic, and career support to address their unique challenges.

Given these challenges, the promotion of employability has emerged as a core objective of higher education institutions, particularly for international students (Singh, 2020; Fakunle, 2021). Institutions are increasingly called upon to integrate employability skills into their curricula, ensuring that students are not only academically prepared but also equipped with the necessary soft skills and

practical experiences to thrive in the labor market (Bennett & Ananthram, 2022; Bridgstock & Jackson, 2019).

While numerous studies have examined employability strategies for international students, there is a lack of consensus on the most effective approaches across diverse cultural contexts. Additionally, the long-term impact of these strategies on international graduates' career trajectories remains understudied (Cull et al., 2022; Taylor et al., 2023). To address these gaps, this study adopts the USEM (Understanding, Skills, Efficacy beliefs, Metacognition) to serve as a theoretical framework for assessing and improving students' employability by emphasizing the importance of self-awareness and skill development in relation to career readiness (Bennett & Ananthram, 2022; Li et al., 2022).

The aim of this study is to explore the specific mechanisms by which higher education institutions enhance international students' employability through the implementation of different educational strategies in the postepidemic era. On the basis of the USEM, this study focuses on the key components of international students' employability and analyses how higher education strategies can support the development of subject knowledge and understanding of professional fields, skills development, self-efficacy and metacognition. This study is expected to provide a theoretical basis and practical guidance for higher education institutions in designing effective support strategies to increase international student employability.

To achieve this goal, this study proposes the following specific research questions on the basis of the USEM:

- RQ1: How can higher education strategies enhance international students' employability by improving their understanding of subject knowledge and areas of specialization (the 'Understanding' dimension of the USEM)?
- RQ2: How do higher education strategies foster the development of generic and vocational skills essential for employability among international students (the 'Skills' dimension of the USEM)?
- RQ3: How do targeted interventions by higher education institutions enhance the self-efficacy of international students (the 'Efficacy beliefs' dimension of the USEM)?
- RQ4: How do higher education strategies support the development of international students' metacognitive abilities (the 'Metacognition' dimension of the USEM)?

THEORETICAL BACKGROUND

The theoretical basis for this study is the USEM of employability, which was developed by Knight and Yorke (2024). The USEM proposes that employability comprises four key dimensions: understanding, skills, efficacy beliefs, and metacognition (Figure 1).

Table 1: Comparison of theoretical frameworks

Dimension	USEM Model	DOTS Model	Career EDGE Model
Primary Focus	Holistic approach to employability through cognitive, psychological, and behavioral dimensions	Career decision-making process	Emotional intelligence and career development
Key Components	Understanding Skills Efficacy beliefs Metacognition	Decision learning Opportunity awareness Transition learning Self-awareness	Career Development Learning Experience Degree Subject Knowledge Generic Skills Emotional Intelligence
Relevance to International Students	High: focus on metacognition and self-efficacy, fitting with the challenges of mixed work and cross-cultural challenges in the postpandemic era	Medium: focus on career decision-making, but insufficient attention to cross-cultural adaptation and psychological support	Medium: Emotional intelligence is emphasized, but lacks systematic integration of cognitive skills
Advantages in the Post-Epidemic Era	Integration of cognitive and psychological factors to cope with mixed work environments, Metacognitive skills to support flexible learning and skill iteration	Structured career decision-making process for stable job market, Opportunity awareness to help identify traditional employment paths	Emotional intelligence to enhance remote collaboration, Generic skills to match digital job requirements
Limitations	Higher implementation complexity, requiring systematic change	Neglect of mental toughness development to cope with uncertain environments	Insufficient attention to cognitive skills

The "understanding" dimension of the USEM refers to students' subject knowledge and their ability to apply that knowledge in relevant contexts (Arthur & Popadiuk, 2013). Educational strategies that can enhance international students' understanding include providing opportunities for hands-on learning, case-based instruction, and interdisciplinary projects that allow students to integrate and apply their knowledge (Li & Lindo, 2022).

The "Skills" dimension encompasses both generic and vocational skills that are valued in the labor market (Arthur & Popadiuk, 2013). Career development support from higher education institutions, such as internships, career counseling, and skills workshops, can play a key role in developing these skills in international students (Fabio & Kenny, 2015; Domínguez et al., 2022). The "efficacy beliefs" dimension of the USEM relates to students' self-confidence and belief in their ability to achieve their goals (Arthur & Popadiuk, 2013). Interventions such as mentoring programs, goal-setting exercises, and the construction of social support networks can help enhance the self-efficacy of international students (Clements & Kamau, 2018; Ching et al., 2019). Finally, the "Metacognition" dimension refers to students' ability to regulate their own learning, problem-solving, and self-reflection (Arthur & Popadiuk, 2013). Strategies such as metacognitive instruction, personalized learning environments, and reflective activities can support the development of these skills in international students (Chen et al., 2023; Saputro et al., 2023).

The USEM was selected over alternative employability frameworks such as the DOTS model (decision learning, opportunity awareness, transition learning, and self-awareness, Law & Watts, 1977) and the Career EDGE model (Dacre Pool & Sewell, 2007) because of its comprehensive emphasis on metacognition and self-efficacy—dimensions particularly critical for international students navigating unfamiliar job markets. Unlike the DOTS model's focus on career decision-making or the Career EDGE model's emphasis on emotional intelligence, the USEM's holistic integration of cognitive and psychological factors aligns with the complex postpandemic challenges faced by international students, including adapting to hybrid work environments and bridging cultural gaps in professional settings.

By examining how higher education strategies can address these four key dimensions of the USEM, this study aims to provide a comprehensive understanding of how institutions can enhance the employability of their international student population in the postpandemic era.

RESEARCH METHOD

The systematic literature review (SLR) method adopted in this study is based on the framework established by Kitchenham et al. (2009). The SLR method offers significant advantages, including the ability to provide comprehensive insights into a research problem by aggregating information from a wide range of sources (Kitchenham et al., 2009). Compared with unstructured approaches such as traditional literature reviews, SLR ensures a more reliable and unbiased synthesis

of data (Stapic et al., 2012). Following the three main phases of SLR—planning, conducting, and reporting (Kitchenham et al., 2009)—this study systematically analyzed relevant publications to explore higher education strategies that enhance the employability, skills development, self-efficacy, and metacognition of international students.

The review focused on identifying how targeted interventions address the four critical dimensions of the USEM: understanding, skills, efficacy beliefs, and metacognition. By synthesizing insights from peer-reviewed literature, this study aims to highlight effective strategies for fostering international students' academic, professional, and personal growth in higher education contexts.

Search Strategy

A systematic search was conducted across two academic databases: Scopus and Web of Science (WOS). To identify relevant studies, the following search terms and Boolean operators were employed: ("Employability" OR "Graduate Employability") AND ("International Students" OR "Foreign Students" OR "Global Students" OR "Overseas Students") AND ("Higher Education" OR "Tertiary Education" OR "University") AND ("Strategies" OR "Interventions" OR "Support Systems" OR "Solutions" OR "Frameworks").

The search targeted studies published between 2020 and 2024 to capture postpandemic strategies, as the COVID-19 pandemic fundamentally altered labor market dynamics and higher education practices (Ting & Liu, 2024). While this date range may exclude prepandemic studies, it ensures relevance to the current challenges faced by international students in rapidly evolving job markets. The publications included were peer-reviewed journal articles related to the social sciences, business management and accounting, and arts and humanities.

Inclusion and Exclusion Criteria

The inclusion and exclusion criteria were applied systematically to ensure the relevance and quality of the selected studies.

Table 2: Inclusion and Exclusion Criteria

Criterion	Eligibility	Exclusion
Document type	Article (automatically filtered by databases: Scopus, WOS)	Nonarticle (e.g., book chapters, conference papers)
Language	English	Non-English
Timeline	Between 2020 and 2024	<2020
Subject area	Social sciences, business management and accounting, arts and humanities	Other than Social sciences, business management and accounting, arts and humanities

Screening and Selection Process

The systematic review followed the PRISMA framework for screening and selecting studies, as illustrated in Figure 1. The process began with a search in two academic databases, Scopus and Web of Science (WOS), which yielded a total of 87 records—49 from Scopus and 38 from WOS. In the first step, duplicate records were removed, leaving 79 unique records for further screening.

In the second step, these 79 records were assessed on the basis of predefined inclusion and exclusion criteria. A total of 44 records were excluded during this stage for several reasons, including being nonarticle publications (e.g., book chapters and conference papers), non-English publications, studies published before 2020, or research outside the relevant subject areas (social sciences, business management and accounting, and arts and humanities).

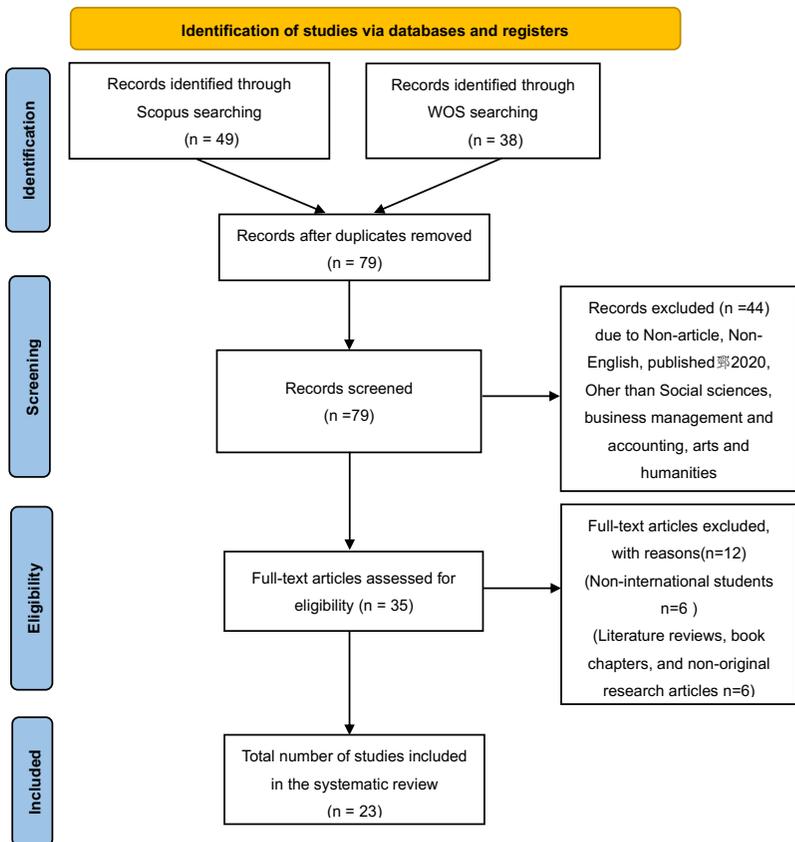


Figure 1. PRISMA Flow Chart

The third step involved an eligibility assessment of the remaining 35 records, where their full texts were evaluated for relevance to the research objectives. During this phase, 12 records were excluded because six focused on noninternational students and the other six were literature reviews, book chapters, or nonoriginal research articles.

Finally, 23 studies were deemed eligible and included in the systematic review for both qualitative and quantitative synthesis. These studies provided substantial insights into strategies, interventions, and frameworks aimed at enhancing the employability of international students in higher education contexts. Figure 1 provides a detailed visualization of the identification, screening, and selection process.

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Summary of Selected Studies

The quality of the included studies was reviewed on the basis of criteria such as research design, data collection methods, analytical approach, and ethical considerations. The final dataset consisted of 23 studies analyzed via qualitative, quantitative, and mixed-method approaches:

Table 3: Research methods of the 23 studies

Qualitative	Quantitative	Mixed Methods
Interviews	13	Survey 1 Convergent parallel design 4
Case study	3	
Action research	1	
Narrative research	1	
Total	18	1

The systematic review included 23 studies focusing on international students in higher education across various countries. These studies focused primarily on universities in English-speaking countries but also included some non-English-speaking contexts.

Among the 23 studies, 12 surveyed international students at Australian universities, representing the largest number of studies within a single country. Six studies investigated the experiences of foreign students at British universities,

whereas two studies focused on international students at New Zealand universities. One paper provided a comparative analysis of international students at both Australian and British universities.

In addition to English-speaking countries, the review also identified studies conducted in other regions. For example, one study surveyed international students at a university in Kazakhstan, and another study included international students at Chinese universities. A further study explored the experiences of international students in Malawi, Namibia, and South Africa, highlighting perspectives from the African continent. Finally, one study surveyed international students at Canadian universities.

The diversity of related studies highlights the varying contexts and challenges faced by international students worldwide, offering valuable insights into how these experiences differ across countries and higher education systems.

Coding and Analysis Process

A deductive coding scheme was developed on the basis of the USEM's four dimensions:

- Understanding: Strategies enhancing subject knowledge.
- Skills: Development of vocational and soft skills.
- Efficacy Beliefs: Interventions that boost confidence.
- Metacognition: Activities fostering self-regulated learning.

To improve objectivity and consistency in data analysis, this study utilized a combination of constant comparative analysis and peer debriefing approaches.

The constant comparative method involves systematically comparing emerging themes across studies and revisiting codes iteratively to ensure alignment with USEM dimensions. For example, Tran et al. (2022) coded labor market workshops under Understanding for bridging cultural knowledge, whereas Soltani & Tomlinson (2024) classified internships under Skills for vocational competency development. By comparing each new data point against existing codes, this method helps maintain analytical rigor and reduces the potential for bias in theme development (Glaser & Strauss, 2017).

To further validate the findings, peer debriefing sessions were conducted with two independent researchers who were not directly involved in the initial coding process. These sessions provided an external review of the coding framework and thematic analysis, offering critical feedback on the clarity and appropriateness of the identified categories. The peer reviewers examined the alignment of the educational strategies with the USEM dimensions, particularly by evaluating whether the interpretations accurately reflected the specific employability needs of international students. Discrepancies in interpretations were discussed, and consensus was reached through iterative discussions, which enhanced the credibility of the study's findings (Lincoln & Guba, 1985).

By integrating these methods, the analysis process was both systematic and transparent, ultimately contributing to the robustness and trustworthiness of the synthesized results. These studies provided comprehensive insights into higher education strategies that support the employability, skill development, self-

Table 4: Analysis of USEM Model Dimensions and Educational Strategies

USEM Model	Unique Focus	Core Codes	Educational Strategies	Authors
Understanding	knowledge acquisition & cultural adaptation	Awareness of labor market demands, cultural appropriateness, sociocultural knowledge Practical knowledge, engagement in work experience	Workshops on labor market navigation, culturally responsive mentoring, inclusive programs Internships, service learning, tailored career services	Tran et al. (2022); Barton & Ryan (2020); Nachatar Singh (2023); Fakunle (2021); Dai & Pham (2024); Taylor et al. (2023)
Skill	Actionable competencies	Job-seeking skills, professional communication, teamwork Work-integrated learning (WIL), ethical decision-making	Resume writing workshops, networking events, collaborative projects Internships, ethical case studies, mentorship programs	Tran et al. (2022); Soltani & Tomlinson (2024); Singh (2024); Sonnenschein & Ferguson (2020) Taylor et al. (2023); Barton & Ryan (2020)
Efficacy beliefs	psychological empowerment & self-confidence	Confidence in employability, career readiness, self-assessment Adaptation to new environments, career aspirations	Reflective feedback, mock interviews, WIL programs Tailored counseling, practice communities	Cull et al. (2022); Blaj-Ward & Matic (2021); Singh (2024) Hajar et al. (2024); Soltani & Donald (2024)
Metacognition	self-directed learning & strategic thinking	Self-regulation, adaptive learning, goal setting	Reflective practices, problem-based learning, peer feedback	Barton & Ryan (2020); Valencia-Forrester & Backhaus (2023); Pham (2022)

	Cultural and communication reflection	Self-directed learning modules, experiential engagement	Hajar et al. (2024); Pham (2022)
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efficacy, and metacognition of international students. The findings informed the subsequent synthesis and analysis presented in this paper.

RESULTS

This section presents the findings of the systematic review. By synthesizing evidence from diverse contexts, this review highlights the range of approaches and interventions employed to support international students in achieving academic and professional success.

Review analysis

This study synthesized findings from various studies examining the role of higher education strategies in enhancing employability. Using the USEM as a guiding framework, the analysis revealed how targeted interventions address four critical dimensions: understanding, skills, efficacy beliefs, and metacognition. Across these dimensions, strategies such as reflective practices, work-integrated learning (WIL), service learning, and tailored career support emerged as essential in fostering international students' academic, professional, and personal growth.

The USEM's dimensions address distinct yet interconnected aspects of employability. Understanding establishes foundational knowledge and cultural awareness, bridging academic learning with workplace realities. Skills focus on actionable competencies, which are differentiated through the direct application of technical and soft skills. Efficacy beliefs build psychological empowerment and confidence in acquired abilities, complementing skill mastery. Metacognition fosters strategic adaptability and reflective learning, enabling long-term growth beyond immediate skill application.

While each dimension targets unique developmental areas, synergies exist—Skills and Efficacy Beliefs mutually reinforce competence and confidence, whereas Understanding and Metacognition together enhance culturally informed, self-regulated career readiness.

Synthesis of Results

To provide a coherent synthesis of the results, the following sections delve into the role of higher education strategies across the four dimensions of the USEM: understanding, skills, efficacy beliefs, and metacognition. Each subsection highlights key interventions and their impact on fostering employability, offering a detailed exploration of evidence-based practices that

empower international students to navigate academic and professional challenges effectively. This structure ensures a comprehensive analysis while connecting theoretical insights with practical applications to support employability enhancement.

Enhancing Employability in the ‘Understanding’ Dimension

Higher education institutions play a pivotal role in enhancing international students’ employability by improving their understanding of subject knowledge and areas of specialization. Strategies such as workshops, career counseling, and informational sessions equip students with knowledge about labor market demands and work rights, empowering them to align their academic pursuits with industry needs. For example, workshops on labor market demands significantly improved students’ ability to secure employment by addressing critical knowledge gaps (Tran et al., 2022; Lin, 2023; Tran & Bui, 2021).

Additionally, culturally responsive reflective practices and inclusive programs allow students to connect academic learning with cultural and community contexts, deepening their understanding of professional environments. Such practices enhance students’ readiness for global job markets (Barton & Ryan, 2020; Nachatar Singh, 2023). Programmes such as the International Student Volunteer Program (ISVP) further bridge theoretical knowledge and practical application, fostering students' confidence and communication skills (Fakunle, 2021; Valencia-Forrester & Backhaus, 2023). Classroom activities designed to promote sociocultural knowledge and leadership skills also prepare students to navigate workplace challenges and industry norms (Soltani & Tomlinson, 2024; Pham et al., 2024; Singh, 2024). Finally, well-designed curricula and practical coursework contribute to students' academic and professional relevance, enhancing their career prospects (Hajar et al., 2024; Blaj-Ward & Matic, 2021; Beloucif et al., 2022).

Development of Generic and Vocational Skills in the ‘Skills’ Dimension

Higher education strategies are instrumental in fostering both generic and vocational skills essential for employability. Generic skills, including communication, teamwork, adaptability, and critical thinking, are developed through programs such as service learning, peer engagement, and reflective discussions. These initiatives significantly enhance students' ability to adapt and collaborate in diverse professional settings (Valencia-Forrester & Backhaus, 2023; Barton & Ryan, 2020).

Vocational skills are cultivated through internships, mentorship programs, and career-relevant work experiences, which provide industry-specific knowledge and practical expertise. For example, practical engagement through internships helps students develop essential work-related skills, including time management and adaptability (Taylor et al., 2023; Hajar et al., 2024). Furthermore, embedding employability skills into academic curricula ensures that students develop a cohesive set of generic and vocational competencies, preparing them for the job

market. Tailored support addressing cultural and social capital gaps also enables students to adapt to diverse professional environments (Tran & Bui, 2021; Beloucif et al., 2022; Nachatar Singh et al., 2023).

Enhancing Self-Efficacy through Interventions in the ‘Efficacy Beliefs’ Dimension

Interventions by higher education institutions significantly enhance students’ self-efficacy and confidence in their professional capabilities. Career support services, such as tailored career counseling, resuming writing workshops, and interview preparation sessions, help students navigate the job market effectively, increasing their belief in their professional potential (Tran et al., 2022; Singh, 2024).

Work-integrated learning (WIL) programs bridge academic knowledge and real-world applications, fostering students’ confidence in achieving career goals and adapting to workplace demands (Cull et al., 2022; Fakunle, 2021). Additionally, reflective practices and feedback mechanisms allow students to analyze their strengths and areas for improvement, fostering a sense of control over their career aspirations (Barton & Ryan, 2020; Blaj-Ward & Matic, 2021). Participation in practice communities and tailored interventions further support students in adapting to new academic and professional environments, enhancing their self-efficacy and confidence (Soltani & Donald, 2024; Hajar et al., 2024).

Supporting Metacognitive Development in the ‘Metacognition’ Dimension

Higher education strategies promote metacognitive skills by fostering self-reflection, problem solving, and self-regulation. Reflective practices, such as self-assessment and feedback mechanisms, improve students’ ability to evaluate their learning processes and adapt strategies to enhance outcomes (Barton & Ryan, 2020; Blaj-Ward & Matic, 2021). Peer learning, problem-based learning, and service programs encourage students to engage collaboratively and develop adaptive learning and problem-solving skills, which are critical for professional environments (Valencia-Forrester & Backhaus, 2023; Singh, 2024).

Additionally, self-directed learning activities and experiential engagement enable students to reflect on cultural practices and improve their communication strategies, making them better equipped to navigate diverse job markets (Pham, 2022). Structured goal-setting exercises and progress feedback further enhance students’ ability to align their academic performance with career aspirations, fostering metacognitive growth (Hajar et al., 2024; Blaj-Ward & Matic, 2021).

DISCUSSION

The findings of this systematic review underscore the critical role of higher education strategies in enhancing the employability of international students through the dimensions outlined in the USEM. By addressing understanding, skills, efficacy beliefs, and metacognition, these strategies equip international

students with the competencies, confidence, and adaptability necessary for navigating the complexities of the global labor market in the postpandemic era. This discussion contextualizes the key findings in relation to the literature and explores implications for policy and practice.

Holistic Strategies for Employability Enhancement

This study's findings both align with and extend existing theories of international student employability through the integrative lens of the USEM, offering critical advancements in the field. While prior frameworks such as the DOTS model (Law & Watts, 1977) emphasize structured career decision-making and the Career EDGE model (Dacre Pool & Sewell, 2007) prioritizes emotional intelligence, the USEM uniquely highlights the interdependence of the cognitive, psychological, and metacognitive dimensions in navigating cross-cultural labor markets.

A key advancement lies in reconceptualizing "Understanding" beyond static knowledge acquisition. Traditional employability frameworks often treat knowledge as a fixed outcome, but this study demonstrates that for international students, understanding necessitates the dynamic integration of cultural, academic, and professional knowledge. For example, workshops on labor market navigation and culturally responsive mentoring (Tran et al., 2022; Nachatar Singh, 2023) not only bridge academic and workplace realities but also challenge the assumption of cultural capital theory (Tomlinson, 2017), which tends to overlook institutional support in mediating cultural adaptation. This extends Yorke's (2006) employability definition by positioning contextualized understanding as a scaffold for skill development, emphasizing its role in bridging structural gaps between education and employment.

Equally critical is the need to redefine skill development through a cross-cultural lens. While work-integrated learning (WIL) and internships are widely endorsed (Taylor et al., 2023), their effectiveness for international students hinges on cultural scaffolding. Service-learning programs that pair students with local communities (Valencia-Forrester & Backhaus, 2023), for example, not only build technical skills but also address the "participation gap" identified in social capital theory (Lin, 2002). This contrasts sharply with the Career EDGE model's focus on generic skill lists, underscoring the necessity of strategies simultaneously cultivating vocational competencies and intercultural fluency—a dimension underexplored in the literature. Such approaches reveal that skill development cannot be divorced from the sociocultural contexts in which students operate, challenging universalist assumptions about employability.

By further advancing this integrative perspective, this study reveals a synergistic relationship between efficacy beliefs and metacognition. While existing research often isolates self-efficacy and metacognition as distinct constructs, this analysis demonstrates their mutual reinforcement in shaping employability. Tailored career counseling and reflective practices (Blaj-Ward & Matic, 2021), for instance, not only bolster students' confidence (efficacy beliefs) but also increase their capacity for strategic adaptability (metacognition). Students

engaged in problem-based learning (Hajar et al., 2024) reported improved self-regulation alongside heightened confidence in navigating ambiguous job markets, illustrating how psychological empowerment and reflective learning coalesce to foster career resilience. This interconnectedness challenges the compartmentalized approaches of earlier frameworks, offering a holistic view of career readiness that acknowledges the interplay between mindset and skill.

Collectively, these findings disrupt the dominant “skill gap” narrative by revealing how employability barriers for international students stem not only from skill deficits but also from structural mismatches between institutional strategies and students’ cultural realities. For example, while WIL programs align with human capital theory’s emphasis on skill acquisition (Tanaka, 2009), their success depends on addressing systemic inequities such as visa restrictions and social capital disparities—factors often absent from policy discussions. By adopting the USEM, institutions can design interventions that address knowledge, skills, self-beliefs, and strategic adaptability simultaneously, advancing a more equitable and theoretically robust approach to employability. This model’s emphasis on interdependencies—between understanding and cultural context, skills and intercultural fluency, efficacy and metacognition—provides a framework for reconciling individual agency with structural support, ultimately empowering international students to navigate the complexities of global labor markets.

Implications for Policy and Practice

The findings of this review have significant implications for higher education institutions and policymakers aiming to increase the employability of international students. First, institutions must adopt a holistic approach that integrates employability into all aspects of the student experience, from academic curricula to extracurricular activities. Second, partnerships with industry and community organizations should be strengthened to provide international students with real-world exposure and networking opportunities. Third, targeted support mechanisms must be designed to address the unique challenges faced by international students, including visa regulations, cultural adaptation, and language barriers.

Policymakers, on the other hand, should consider revising immigration and labor policies to facilitate smoother transitions for international graduates into local job markets. Providing pathways for poststudy work opportunities not only enhances employability but also strengthens the economic contributions of international students.

Limitations and Future Directions

While this systematic review advances the understanding of employability strategies for international students, several limitations warrant consideration. First, the reliance on published literature introduces potential publication bias, as studies with positive outcomes are more likely to be disseminated, whereas unsuccessful interventions or context-specific challenges may remain

underrepresented. This bias could skew the synthesis toward overly optimistic conclusions about strategy efficacy. Additionally, the exclusion of non-English studies—a necessary constraint given language barriers—may overlook critical insights from non-Western contexts, particularly in regions such as Africa, Latin America, and the Middle East, where international student mobility is growing rapidly but remains underresearched.

The generalizability of findings is further constrained by the geographic and cultural concentration of existing research. Over 70% of the analyzed studies focused on Anglophone countries, which prioritize labor market integration through standardized career services. However, strategies effective in these contexts may falter in regions with divergent cultural norms. For example, cultural differences between individualist Western societies and collectivist East Asian societies can impact educational approaches and career readiness. Self-focused training enhances self-efficacy and performance for individualists, whereas group-focused training is more effective for collectivists (Earley, 1994). Similarly, metacognitive practices such as reflective practices, which are often promoted in individualized learning environments, may require adaptation in cultures where self-criticism is less openly encouraged (Heine & Hamamura, 2007). These cultural mismatches underscore the need for context-sensitive adaptations of the USEM rather than universal application.

Methodologically, the qualitative focus of most included studies, while rich in depth, limits the ability to quantify strategy effectiveness or isolate causal relationships. For example, while mentorship programs are widely endorsed (Nachatar Singh, 2023), the lack of comparative data makes it difficult to assess whether their benefits stem from cultural alignment, program structure, or participant demographics.

Future research should address the identified limitations by exploring the efficacy of these strategies across a broader range of cultural and institutional settings. Longitudinal studies that track the academic and professional trajectories of international students could offer deeper insights into the sustained impact of interventions over time. Additionally, mixed-methods research that combines qualitative and quantitative approaches could provide a more comprehensive understanding of how students experience and benefit from these strategies. Examining the intersectionality of factors such as gender, socioeconomic status, and cultural background within the context of the USEM would also contribute to more nuanced and equitable policy recommendations. Finally, further investigation into emerging trends, such as the integration of digital tools and artificial intelligence in career development programs, could help institutions adapt to the rapidly evolving demands of global labor markets.

CONCLUSION

This systematic review highlights the pivotal role of higher education institutions in enhancing international student employability through the USEM, offering actionable insights for policymakers and practitioners in the postpandemic era. To

address the evolving demands of global labor markets, institutions must adopt integrated strategies that embed the USEM dimensions—Understanding, Skills, Efficacy Beliefs, and Metacognition—into curricula and career services. For example, interdisciplinary modules that combine subject knowledge with workshops on emerging skills such as AI literacy or remote collaboration tools can bridge academic learning and workplace realities, whereas hybrid work-integrated learning (WIL) programs, such as virtual internships with multinational corporations, can mitigate visa barriers and build vocational competencies. Culturally adaptive career counseling, tailored to regional challenges such as visa policies in Anglophone countries or language barriers in East Asia, should prioritize fostering self-efficacy through mentorship and confidence-building interventions. Policymakers, meanwhile, must advocate for flexible poststudy work visas aligned with sector-specific labor shortages and fund metacognition-focused initiatives, such as digital portfolios and AI-driven mentoring platforms, to help students track skill development and reflect on cross-cultural learning.

The postpandemic shift toward remote work and digital hiring necessitates reimagining employability strategies. Institutions should leverage virtual career fairs with AI matchmaking tools to connect students with global employers and mandate training in remote collaboration platforms and digital credentialing to enhance both their technical skills and metacognitive adaptability. These efforts must be contextualized to regional realities: in Western contexts, industry mentorship networks can address systemic exclusion in competitive job markets, whereas Asia-Pacific institutions should strengthen language support and local industry partnerships to align academic training with employer expectations. Emerging destinations such as the UAE or Kazakhstan might invest in cultural integration programs that foster reciprocal learning between international students and host communities.

The diversity of international student experiences demands globally collaborative yet locally nuanced solutions. African students in Europe may benefit from visa advocacy, whereas Latin American students in Asia might require targeted language support. By framing the USEM as a flexible, culturally responsive framework—rather than a rigid checklist—institutions can balance standardization with adaptability. Ultimately, enhancing employability transcends institutional boundaries, requiring partnerships between governments, industries, and communities to address structural inequities. This collective effort not only empowers students to thrive as resilient, culturally agile professionals but also advances equitable economic recovery in an interconnected world. By transforming postpandemic challenges into opportunities, higher education can ensure that international graduates emerge as confident, innovative contributors to the 21st-century workforce.

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