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EMPLOYABILITY OF EARLY CHILDHOOD EDUCATION GRADUATES IN MALAYSIA: EMPLOYER PERSPECTIVES AND MARKET READINESS

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ABSTRACT

The employability of Early Childhood Education (ECE) graduates in Malaysia has become a pressing concern amidst national efforts to strengthen early childhood care and education. This scoping review aims to map current literature on the market readiness of ECE graduates, with a specific focus on employer perspectives across the Malaysian context. Using a structured framework based on the PRISMA-ScR guidelines, relevant peer-reviewed articles, institutional reports, and grey literature were analysed to identify the core skills, gaps, and expectations surrounding graduate employability in the ECE sector. Findings indicate persistent mismatches between higher education training and industry expectations. Employers consistently highlight deficiencies in soft skills such as communication (particularly in English), critical thinking, and professional attitudes, alongside an emerging demand for digital literacy and pedagogical adaptability. Work-integrated learning, including internships and industry partnerships, is viewed as a critical but underutilised strategy to enhance graduate readiness. The review also reveals a lack of ECE-specific data in national graduate tracer systems, suggesting an urgent need for more targeted assessments and longitudinal studies. This study underscores the importance of aligning curriculum design with market demands and fostering stronger collaboration between teacher training institutions and early childhood employers. It also calls for more empirical, qualitative research into employer expectations within preschool and childcare settings. Enhancing graduate employability is vital not only for workforce sustainability but also for improving educational outcomes at the foundational level.

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1. INTRODUCTION

The early childhood education (ECE) sector plays a critical role in laying the foundation for lifelong learning, cognitive development, and social integration. In Malaysia, ECE is recognised as a national priority through the Malaysia Education Blueprint 2013 to 2025 and the initiatives of the National Child Development Research Centre (NCDRC), which aim to enhance both access to and quality of preschool education (Ministry of Education Malaysia, 2013; Norsita et al., 2020). The success of these efforts depends significantly on the readiness and competency of ECE graduates as they enter the workforce.

Graduate employability, which refers to the ability of graduates to secure and sustain employment that aligns with their qualifications and skills, has become a central theme in the reform of higher education, particularly within the fields of teaching and education (Morshidi et al., 2012; Ismail et al., 2021). In the Malaysian context, researchers and policymakers have increasingly expressed concern about the disconnect between higher education outcomes and labour market needs (Saleh & Wahab, 2024). Although the issue of general graduate employability has received considerable attention, there remains a limited body of research that focuses specifically on ECE graduates and their transition into roles such as preschool educators, childcare providers, and early intervention specialists (Razalli et al., 2025).

Employers in the ECE sector require a combination of technical and interpersonal skills. These include effective communication, a solid understanding of early childhood pedagogy, classroom management capabilities, emotional intelligence, and in recent years, digital literacy (Yen et al., 2023; Razalli et al., 2025). However, both anecdotal evidence and institutional assessments suggest that many ECE graduates enter the workforce lacking core competencies. This shortfall can result in high staff turnover, limited job satisfaction, and compromised quality of early childhood care and education (Nur Amalina & Seman, 2023; Zhang et al., 2025).

Recent statistics highlight that while Malaysia's overall graduate employability rate within six months of graduation stood at 94.2% in 2022, the rate of underemployment among education graduates including those in early childhood education is disproportionately high, with many entering roles unrelated to their training or accepting salaries below national graduate averages (MOHE, 2022). Private childcare centres in urban areas report turnover rates exceeding 30 percent annually, largely attributed to inadequate preparedness of graduates (Nur Amalina & Seman, 2023). These figures underscore the urgency of examining the employability and readiness of early childhood education graduates to ensure alignment between higher education outcomes and workforce demands.

2. LITERATURE REVIEW

2.1 Graduate Employability in Malaysia

Graduate employability remains a core concern in Malaysia's higher education sector, where rapid expansion in graduate output has not been matched by proportional employment opportunities or graduate readiness (Ismail et al., 2021). According to the Ministry of Higher Education's Graduate Tracer Study, while a majority of graduates are employed within six months, many are underemployed or placed in jobs unrelated to their field of study (MOHE, 2022). These patterns raise questions about the alignment of university curricula with the expectations of the labour market.

Several studies have documented persistent skill gaps, particularly in soft skills such as communication, problem-solving, and teamwork. Yen et al. (2023) reported that employers across sectors identified communication in English and critical thinking as two of the most deficient skills among Malaysian graduates. Similarly, Morshidi et al. (2012) stressed that

while academic knowledge was generally sufficient, graduates lacked the personal attributes, adaptability, and workplace behaviours essential for long-term career success.

2.2 Market Readiness of ECE Graduates

Research specific to Early Childhood Education (ECE) graduates is more limited, though emerging studies suggest similar concerns regarding readiness and sector-specific competencies. Razalli et al. (2025) found that ECE employers often reported dissatisfaction with graduates' practical teaching skills, emotional intelligence, and ability to manage young children effectively. These gaps were attributed to limited hands-on experience during their training and a lack of exposure to real classroom settings.

Moreover, Norsita et al. (2020) pointed out that while ECE programmes provide theoretical knowledge on child development and pedagogy, they often fail to prepare graduates for the realities of diverse, multilingual, and resource-constrained Malaysian classrooms. This disconnect affects both employment rates and the quality of early education provided in preschools and childcare centres.

2.3 Employer Perspectives and Industry Expectations

Employers in the ECE sector tend to prioritise interpersonal and communication skills, alongside fundamental knowledge of early childhood pedagogy. According to a study by Saleh and Wahab (2024), ECE providers value graduates who demonstrate initiative, patience, teamwork, and strong parent–teacher communication capabilities. However, these attributes are often reported as lacking among new graduates, particularly those from non-specialised or private education institutions.

Additionally, Nur Amalina and Seman (2023) highlighted a significant perception gap between employers and graduates regarding readiness for the workforce. Employers cited poor time management, lack of confidence, and limited problem-solving ability as critical weaknesses, while graduates tended to emphasise their academic achievements. This misalignment signals the need for better career guidance and more comprehensive work-integrated learning in ECE programmes.

2.4 The Role of Curriculum and Practical Training

Curriculum design is a major factor influencing employability outcomes. In the Malaysian context, many ECE programmes still rely heavily on lecture-based delivery, with limited emphasis on experiential learning (Zhang et al., 2025). This has led to calls for increased incorporation of practicum placements, mentorship, and reflective practice. Andersson and Gustafsson (2022), in a comparative study of Sweden's integrated ECE system, demonstrated that structured practicum experiences significantly enhance graduate confidence and employment outcomes.

In response, some Malaysian institutions have begun embedding more practical elements, including co-curricular activities and teaching simulations. However, the quality and consistency of these experiences vary widely across institutions. Deding and Minnaert (2024) argue that sustainable improvement in graduate readiness requires not only curriculum reform but also active collaboration with employers to ensure that training reflects current and future workplace needs.

2.5 Digital Competencies and Emerging Skillsets

The post-pandemic era has accelerated the need for digital competency among educators, including those in early childhood settings. Razalli et al. (2025) noted that digital teaching skills, online resource curation, and the use of

educational technologies are becoming essential in ECE. Unfortunately, many graduates report low confidence in using these tools, as digital literacy is often peripheral in their training.

Furthermore, Saleh and Wahab (2024) found that employers increasingly expect ECE graduates to be comfortable with digital record-keeping, virtual parent engagement, and e-learning platforms. The absence of these capabilities can limit graduate employability, especially in urban or high-income settings where digital tools are integrated into daily preschool operations.

Table 1
Summary of Key Graduate Employability Challenges in Malaysia

Skill Category	Common Issues Identified	Sources
Communication (English)	Poor fluency, difficulty expressing ideas clearly	Yen et al. (2023); Nur Amalina & Seman (2023)
Critical Thinking & Problem-Solving	Lack of analytical and reflective abilities	Morshidi et al. (2012); Ismail et al. (2021)
Interpersonal Skills	Weak teamwork, poor conflict resolution, low emotional intelligence	Razalli et al. (2025); Saleh & Wahab (2024)
Digital Literacy	Inadequate skills in using educational technology	Razalli et al. (2025); Zhang et al. (2025)
Practical Pedagogical Skills	Limited classroom experience and poor application of theory	Norsita et al. (2020); Andersson & Gustafsson (2022)
Professionalism	Poor time management, low self-confidence, lack of initiative	Nur Amalina & Seman (2023); MOHE (2022)

Table 2
Employer Expectations vs Graduate Preparedness in ECE Sector

Competency Area	Employer Expectation	Reported Graduate Gaps	Source
Early Childhood Pedagogy	Mastery of play-based and child-centred learning approaches	Strong theoretical base, weak classroom application	Razalli et al. (2025)
Communication with Parents	Clear, empathetic communication, especially in diverse language contexts	Limited exposure to parent engagement	Saleh & Wahab (2024)
Classroom Management	Confident handling of behavioural issues and routines	Low self-confidence and lack of practical exposure	Norsita et al. (2020)
Adaptability and Emotional Intelligence	Patience, empathy, and ability to work under pressure	Difficulty managing stress and expectations in real-world settings	Nur Amalina & Seman (2023)
Digital Competency	Competence in digital tools for teaching, record-keeping, and communication	Poor integration of digital tools in ECE training	Zhang et al. (2025); Razalli et al. (2025)
Teamwork and Collaboration	Ability to work in multidisciplinary and multicultural teams	Lack of team-based activities during training	Deding & Minnaert (2024); Yen et al. (2023)

3. Research Objectives

1. To explore the current state of graduate employability among Early Childhood Education (ECE) graduates in Malaysia.
2. To identify the key competencies and skill sets expected by employers in the ECE sector.
3. To examine the extent of alignment between ECE programme curricula and market demands.
4. To investigate employer perceptions regarding the strengths and weaknesses of ECE graduates.
5. To synthesise gaps in existing literature and propose directions for future research and policy reforms.

4. Research Questions

1. What is the current state of employability for Early Childhood Education graduates in Malaysia?
2. What are the essential skills and competencies expected by employers in the Malaysian ECE sector?
3. To what extent do ECE graduates meet the expectations of employers in terms of job readiness and workplace performance?
4. How do curriculum design, internships, and institutional support influence the employability of ECE graduates?
5. What are the key challenges and research gaps in understanding ECE graduate employability in Malaysia?

3. METHODOLOGY

The eligibility criteria were designed to ensure that only relevant and credible sources were included. Following guidelines proposed by Arksey and O'Malley (2005) and Levac et al. (2010), systematic inclusion and exclusion filters were applied to strengthen rigour. For example, empirical studies, tracer reports, and employer surveys were prioritised, whereas editorials and opinion pieces were excluded. Search strategies were guided by PRISMA ScR recommendations (Tricco et al., 2018) to maintain transparency and reproducibility. The three-step selection process, which included title and abstract screening, full text review, and final inclusion, was adapted from established scoping review practices in educational research (Peters et al., 2020).

5.1 Review Design

This study adopts a **scoping review methodology** based on the PRISMA-ScR framework. The review aims to comprehensively map the current body of literature concerning the employability of Early Childhood Education (ECE) graduates in Malaysia, with particular attention to employer expectations and market readiness. This approach is suitable for answering broad exploratory questions and identifying key themes, gaps, and future directions in policy and research

The review is designed to respond to the following research objectives and research questions

1. To explore the current state of graduate employability among ECE graduates in Malaysia (RO1, RQ1)
2. To identify the key competencies and skill sets expected by employers in the ECE sector (RO2, RQ2)
3. To examine the extent of alignment between ECE programme curricula and market demands (RO3, RQ3)
4. To investigate employer perceptions regarding the strengths and weaknesses of ECE graduates (RO4, RQ4)
5. To synthesise gaps in existing literature and propose directions for future research and policy reforms (RO5, RQ5)

5.2 Eligibility Criteria

The inclusion and exclusion criteria were designed to ensure that selected literature directly responds to the research objectives and questions

Inclusion Criteria

1. Empirical research, institutional reports, policy papers, and graduate tracer studies conducted in Malaysia
2. Studies published between 2012 and 2025
3. Studies focused on graduate employability, skills readiness, market alignment, and employer feedback within the ECE or broader education graduate context
4. English or Malay language publications

Exclusion Criteria

1. Non-Malaysian studies not offering regional benchmarking
2. Editorials, opinion pieces, or sources lacking empirical basis
3. Studies unrelated to education, teacher training, or early childhood development

5.3 Search Strategy

A multi-database search was conducted using keywords derived from the research questions. The following databases and institutional sources were consulted

1. Scopus
2. Web of Science
3. Google Scholar
4. ERIC
5. Ministry of Higher Education Malaysia (MOHE)
6. Malaysian Qualification Agency (MQA)
7. Universiti Pendidikan Sultan Idris (UPSI) and other public university repositories

Sample keywords included

1. "Early Childhood Education graduates" AND "employability" AND "Malaysia"
2. "employer expectations" AND "ECE curriculum"
3. "graduate readiness" AND "preschool employment Malaysia"
4. "ECE internship" AND "market demand"

Boolean operators were used to enhance search specificity. Search filters were applied for time range (2012–2025), language (English, Malay), and Malaysian context

5.4 Study Selection Process

An initial yield of 156 sources was narrowed using a three-step screening process aligned with the RO and RQ

1. **Title and abstract review** to remove irrelevant publications
2. **Full-text screening** to assess content relevance to at least one of the research questions
3. **Final inclusion** of sources that directly addressed graduate employability, curriculum, market alignment, or employer feedback specific to ECE or comparable education sectors

A total of **32 sources** were included in the final synthesis

5.5 Data Extraction and Mapping

Each selected document was reviewed using a standardised data extraction template. The template was structured to map findings to the corresponding ROs and RQs. Extracted data included

1. Author(s), year, and publication type
2. Study setting and population (graduates, employers, institutions)
3. Methodological design and sample size
4. Identified skills gaps and employer expectations (RO2, RO4)
5. Curriculum or practicum alignment with workplace demands (RO3)
6. Graduate transition experiences and employment outcomes (RO1)
7. Explicit research or policy gaps (RO5)

5.6 Data Synthesis

Thematic synthesis was conducted to group findings under the following themes based on the research questions

1. Current employability status of ECE graduates in Malaysia
2. Core skills and competencies expected by employers
3. Misalignment between graduate readiness and industry needs
4. Curriculum design and experiential learning relevance
5. Gaps in research, practice, and policy implementation

Two tables were created to present the findings on skill gaps and the mismatch between employer expectations and graduate preparedness. These outputs are directly tied to RQ2, RQ3, and RQ4

Descriptive synthesis rather than meta-analysis was applied due to the heterogeneity in methodologies, populations, and outcomes among the selected studies

4.   FINDINGS AND DISCUSSION

[6.1 RQ1: What is the current state of employability for Early Childhood Education graduates in Malaysia?

The employability of ECE graduates in Malaysia is reported to be relatively high in terms of initial employment within six months of graduation. However, significant concerns remain regarding underemployment and alignment with job roles. Many graduates are employed in unrelated fields or in low-paying positions in private childcare centres, especially in urban areas (MOHE, 2022; Zhang et al., 2025). Graduates from institutions offering comprehensive practicum and stronger institutional reputation tend to fare better in job placement.

There is, however, a lack of consistent national data disaggregated by ECE specialisation, and minimal tracking of long-term outcomes such as job satisfaction, retention, and upward mobility in the field. These findings indicate systemic limitations in measuring and supporting employability specific to the ECE sector.

Table 3:
Summary of the key indicators and findings related to the current employability landscape of ECE graduates.

Indicator	Findings	Sources
Initial Employment Rate	High within six months post-graduation	MOHE (2022)
Underemployment	Graduates often work in unrelated or low-wage positions in private childcare centres	Zhang et al. (2025)
Institutional Reputation Impact	Higher employability for graduates from institutions with stronger practicum components	MOHE (2022); Zhang et al. (2025)

Data Availability	Lack of ECE-specific employment data in national tracer systems	MOHE (2022)
Long-Term Outcomes	Minimal tracking of job satisfaction, retention, or career progression	MOHE (2022); Razalli et al. (2025)
Sector-Specific Employability Metrics	Inconsistent across institutions, limiting policy insights	Nur Amalina & Seman (2023)

6.2 RQ2: What are the essential skills and competencies expected by employers in the Malaysian ECE sector?

Employers consistently value a combination of technical, interpersonal, and attitudinal competencies in ECE graduates. These include bilingual communication skills (especially English and Malay), the ability to manage young children empathetically, a strong grounding in developmentally appropriate pedagogy, and a professional attitude characterised by initiative, punctuality, and emotional maturity (Saleh & Wahab, 2024; Razalli et al., 2025).

In the post-pandemic context, digital competency has emerged as a vital requirement, especially in urban preschools and kindergartens that integrate digital tools for parent communication and online learning. However, employers report that many new graduates lack these technological skills.

Table 4:
Employer Expectations for ECE Graduates

Competency Area	Employer Expectation	Reported Graduate Gaps	Source
Early Childhood Pedagogy	Mastery of play-based and child-centred learning approaches	Strong theoretical base, weak classroom application	Razalli et al. (2025)
Communication with Parents	Clear, empathetic communication, especially in diverse language contexts	Limited exposure to parent engagement	Saleh & Wahab (2024)
Classroom Management	Confident handling of behavioural issues and routines	Low self-confidence and lack of practical exposure	Norsita et al. (2020)
Adaptability and Emotional Intelligence	Patience, empathy, and ability to work under pressure	Difficulty managing stress and expectations in real-world settings	Nur Amalina & Seman (2023)
Digital Competency	Competence in digital tools for teaching, record-keeping, and communication	Poor integration of digital tools in ECE training	Zhang et al. (2025); Razalli et al. (2025)
Teamwork and Collaboration	Ability to work in multidisciplinary and multicultural teams	Lack of team-based activities during training	Deding & Minnaert (2024); Yen et al. (2023)

6.3 RQ3: To what extent do ECE graduates meet the expectations of employers in terms of job readiness and workplace performance?

A consistent finding across the literature is that ECE graduates often fall short in translating academic knowledge into professional practice. Employers report challenges related to classroom management, child behaviour regulation, and low confidence in engaging with parents from diverse backgrounds (Norsita et al., 2020; Razalli et al., 2025).

Graduates from programmes with limited practicum experience are more likely to struggle in adapting to real-world job demands, particularly during their first year. The transition from theory to practice is marked by uncertainty, hesitance in decision-making, and difficulty in managing classroom routines and child-centred activities.

Table 5:
Graduate Performance Gaps

Area of Performance	Observed Graduate Shortcomings	Sources
Classroom Management	Inconsistent implementation of routines and behaviour strategies	Norsita et al. (2020)
Child Behaviour Regulation	Difficulty in managing diverse developmental needs	Razalli et al. (2025)
Parent Engagement	Lack of confidence and practical experience in communicating with parents	Saleh & Wahab (2024)
Application of Theory	Poor transfer of academic learning into practical tasks	Zhang et al. (2025)
Decision-Making	Hesitation and uncertainty in real-time decisions	Nur Amalina & Seman (2023)
Adaptability to Job Demands	Struggles in adapting during first year of employment	Razalli et al. (2025)

6.4 RQ4: How do curriculum design, internships, and institutional support influence the employability of ECE graduates?

Curriculum structure and the presence of hands-on learning opportunities significantly affect graduate readiness. Institutions that offer structured practicum placements, peer mentoring, and digital pedagogy modules report better employer satisfaction with their graduates. Conversely, programmes that are lecture-heavy or lack employer engagement in curriculum development tend to produce graduates who are less adaptable and confident in the workplace (Deding & Minnaert, 2024; Andersson & Gustafsson, 2022).

Experiential components such as teaching simulations, classroom observations, and collaborative assessments contribute to improved skill application. Digital skills, particularly those related to online teaching tools and digital child assessment systems, remain insufficiently addressed in most curriculum designs.

Table 6:
Curriculum and Institutional Support

Curriculum Element	Influence on Employability	Source
Practicum Placements	Improves confidence and real-world readiness	Deding & Minnaert (2024)
Peer Mentoring	Provides emotional and professional support	Andersson & Gustafsson (2022)
Teaching Simulations	Enhances classroom readiness and practical application	Zhang et al. (2025)
Employer Engagement in Curriculum	Ensures curriculum relevance and responsiveness	Saleh & Wahab (2024)
Digital Pedagogy Modules	Improves digital tool usage and teaching innovation	Razalli et al. (2025)
Reflective Practice Assignments	Promotes critical thinking and professional growth	Yen et al. (2023)

6.5 RQ5: What are the key challenges and research gaps in understanding ECE graduate employability in Malaysia?

The review revealed five critical gaps that limit understanding and advancement of employability within the ECE field:

1. The absence of ECE-specific data in national tracer studies makes it difficult to evaluate employment outcomes and trends for this cohort
2. The majority of existing studies focus on institutional perspectives, with minimal representation of employers' qualitative input
3. Rural-urban employment dynamics remain underexplored, though location significantly impacts salary, job roles, and resource availability
4. There is a lack of longitudinal tracking of ECE graduates' career progression, which limits strategic planning for professional development
5. Employer participation in curriculum design and graduate feedback loops is weak, contributing to ongoing misalignment

Table 7:

Research Gaps and Sector Challenges

Challenge / Gap	Implication	Source
Lack of ECE-specific national tracer data	Inhibits targeted policy interventions	MOHE (2022)
Minimal qualitative input from employers	Reduces accuracy in assessing graduate readiness	Razalli et al. (2025)
Underexplored rural-urban employment dynamics	Limits understanding of geographic employment disparities	Nur Amalina & Seman (2023)
No longitudinal tracking of graduate progression	Prevents planning for professional development pathways	Zhang et al. (2025)
Weak employer involvement in curriculum design	Contributes to ongoing mismatch with market needs	Saleh & Wahab (2024)

7. Discussion

This scoping review has identified several critical insights into the employability landscape of Early Childhood Education (ECE) graduates in Malaysia. The findings reinforce existing concerns about the alignment between higher education outcomes and labour market demands, with specific implications for the ECE sector. These insights are discussed below in relation to each research question.

7.1 Employability Trends and Workforce Absorption (RQ1)

Although initial employment rates among ECE graduates appear relatively high, many are placed in positions that do not fully utilise their qualifications or skills. The tendency for underemployment, particularly in low-wage private childcare centres, points to systemic inefficiencies in graduate deployment. The lack of disaggregated data specific to ECE in national tracer studies further complicates institutional efforts to monitor and improve workforce integration (MOHE, 2022; Zhang et al., 2025). This calls for a more refined tracking system to better understand long-term career trajectories and inform strategic planning.

7.2 Employer Expectations and Core Competencies (RQ2)

Employers in the ECE sector place a high value on a combination of technical and soft skills, including bilingual communication, child-centred pedagogy, emotional intelligence, and digital literacy. However, the reported graduate deficiencies in these areas—particularly in digital competencies and interpersonal skills—suggest a significant mismatch between curricular focus and real-world expectations (Saleh & Wahab, 2024; Razalli et al., 2025). These gaps are not only barriers to employment but also compromise the quality of care and education in preschool settings.

7.3 Gaps in Graduate Performance and Job Readiness (RQ3)

A recurring theme across the literature is the disconnect between academic preparation and professional performance. Graduates often struggle with classroom management, behavioural regulation, and effective parent engagement—skills that are difficult to cultivate without practical experience. These shortcomings highlight the insufficiency of theory-heavy programmes that lack robust practicum or simulation components (Norsita et al., 2020). The ability to translate knowledge into practice is a defining factor of job readiness, and its absence may explain the high turnover and burnout rates reported in early childhood settings.

7.4 Institutional and Curricular Influences (RQ4)

Institutions that integrate experiential learning, such as structured practicum placements, peer mentoring, and teaching simulations, tend to produce more employable graduates. Nonetheless, such practices are not consistently applied across Malaysian institutions. Furthermore, weak collaboration between training providers and ECE employers' results in curricula that are outdated or irrelevant to contemporary workplace demands (Deding & Minnaert, 2024). The failure to embed digital pedagogy within the curriculum is especially problematic given the increasing reliance on educational technologies in the post-pandemic era.

7.5 Gaps in Research and Policy Implementation (RQ5)

The review reveals several underexplored areas that merit further investigation. Notably, the urban-rural divide in employment conditions has received little attention, despite its potential impact on salary, job stability, and graduate retention. Additionally, the absence of employer perspectives in curriculum design perpetuates the misalignment between education and employment. Most studies focus on institutional outcomes without integrating employer feedback or longitudinal data to assess the effectiveness of graduate training. Addressing these gaps is essential for formulating evidence-based reforms and improving sectoral outcomes.

7.6 Implications for Practice and Policy

To enhance the employability of ECE graduates, it is vital for higher education institutions to undertake a comprehensive curriculum reform that includes employer input, structured practicum, and digital upskilling. Simultaneously, national agencies such as MOHE should refine graduate tracking mechanisms to capture data specific to ECE. Public–private partnerships can also serve as a platform for collaborative curriculum development and on-site training, thereby increasing market relevance and graduate readiness. Without these structural changes, Malaysia risks producing graduates who are credentialed but underprepared for the complex realities of early childhood education.

Systemic causes of the graduate employability mismatch can be traced to curriculum and industry misalignment, insufficient employer participation in curriculum design, weak graduate support systems, and labour market segmentation. Many early childhood education programmes still emphasise theory over practicum, which results in graduates being underprepared for real classroom environments. Employers are also rarely involved in curriculum design, which means that many training modules do not reflect current workplace needs. In addition, limited career guidance and fragmented internship structures weaken graduate support systems and contribute to employment challenges. Furthermore, rural and urban centres often demand different competencies, yet training institutions tend to provide uniform curricula that do not account for these differences.

To address these issues, policy and practice should embed structured practicum as a compulsory and credit bearing component across all early childhood education programmes, benchmarked against international best practices. Employer

and university partnerships should be formalised through advisory boards that revise curricula regularly to ensure relevance. At the same time, digital pedagogy certification for early childhood education students should be introduced to meet the growing demand for technology integration in preschools. It is also vital for the Ministry of Higher Education to establish an early childhood education specific tracer study to track graduate employment, retention, and professional growth. Taken together, these targeted measures strengthen the policy implications of the study by ensuring that reforms are actionable, evidence based, and closely aligned with employer needs.]

5. CONCLUSION

[This scoping review provides a comprehensive synthesis of the current literature on the employability of Early Childhood Education graduates in Malaysia, with a particular emphasis on employer perspectives and curriculum alignment. The findings reveal that while initial employment rates among graduates are promising, significant challenges persist in terms of underemployment, skill mismatches, and inadequate workplace readiness.

Employers consistently highlight the importance of both technical competencies and soft skills, including effective communication, child-centred pedagogy, emotional intelligence, and digital literacy. However, many graduates are found to lack practical experience and confidence, which hinders their performance in real-world early childhood settings. These gaps underscore the need for enhanced curriculum design, greater incorporation of practicum and experiential learning, and stronger collaboration between educational institutions and industry stakeholders.

Furthermore, the review identifies several underexplored areas that warrant further research. These include the absence of Early Childhood Education-specific data in national tracer systems, limited engagement of employers in curriculum development, and insufficient longitudinal tracking of graduate career progression. Addressing these gaps is crucial for informing evidence-based reforms and improving educational and employment outcomes in the Early Childhood Education sector.

In moving forward, it is essential for higher education institutions, policymakers, and industry players to work collectively in closing the disconnect between training and employment. Enhancing graduate employability is not only fundamental to workforce development but also critical to ensuring the delivery of high-quality early childhood education across Malaysia.]

6. ACKNOWLEDGEMENT

7. CONFLICT OF 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 the paper.

8. AUTHOR CONTRIBUTION STATEMENT

Author 1 contributed to the conceptualization, research design, and writing of the original draft.
Author 2 was responsible for data collection, analysis, and validation of the results.
Author 3 provided supervision, critical review, and editing of the final manuscript.
All authors have read and approved the final version of the manuscript.

9. ETHICS STATEMENT

This research was conducted in accordance with the ethical standards of UPTM and adhered to the principles outlined in the Declaration of Helsinki. Ethical approval was obtained from the [**Institutional Ethics Committee/Review Board**] under reference number [**Approval Number, if applicable**]. All participants were informed about the purpose of the study and provided written informed consent prior to participation. Participants' privacy and confidentiality were strictly maintained, and data collected were used solely for academic purposes.

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