

Employability of Early Childhood Education Graduates in Malaysia: Employer Perspectives and Market Readiness

**Mohd Zuri Ghani^{1*}, Azie Azlina Azmi¹, Suzilawati Uyub², Mohamed Suhaimi Yusof²,
Muhamad Fitri Radzuan³**

¹ Faculty of Education, Social Science, and Humanities (FESSH), Universiti Poly-Tech Malaysia, 56100 Kuala Lumpur

² Faculty of Business and Accountancy, Universiti Poly-Tech Malaysia, 56100 Kuala Lumpur

³ Faculty of Education and Social Sciences, University College of Malaysia International (UCMI), 50480 Kuala Lumpur

Corresponding author: Mohd Zuri Ghani
Email: zuri@uptm.edu.my
DOI: <https://doi.org/10.61688/ajpbs.v6i2.412>

Article History

Received	Revised	Accepted	Published
31 October 2025	20 November 2025	30 November 2025	31 December 2025

ABSTRACT

The employability of Early Childhood Education (ECE) graduates in Malaysia has become an important concern amid national efforts to strengthen early childhood care and education. This scoping review maps current literature on the market readiness of ECE graduates, with particular attention to employer expectations in the Malaysian context. Using a structured scoping review approach informed by established methodological guidance and PRISMA-ScR reporting recommendations, relevant peer-reviewed studies, institutional reports, and grey literature were synthesised to identify recurring skills, gaps, and expectations surrounding graduate employability in the ECE sector. The reviewed literature points to persistent mismatches between higher education preparation and workplace expectations, particularly in communication, critical thinking, professional attitudes, digital literacy, and the practical application of pedagogy. Work-integrated learning, including practicum placements, internships, and stronger institutional-industry collaboration, is repeatedly identified as important for improving graduate readiness. The review also highlights limited ECE-specific data in national graduate tracer systems and insufficient longitudinal evidence on employment progression. Overall, the evidence supports closer curriculum-industry alignment and more targeted empirical research on employer expectations in preschool and childcare settings. Strengthening graduate readiness is relevant to both workforce sustainability and the quality of early childhood education.

Keywords: *Early Childhood Education, Graduate Employability, Employer Perspectives, Market Readiness, Malaysia, Curriculum Alignment, Soft Skills, Digital Literacy*

How to Cite

Ghani, M. Z., Azmi, A. A., Uyub, S., Yusof, M. S., & Radzuan, M. F. (2025). Employability of Early Childhood Education Graduates in Malaysia: Employer Perspectives and Market Readiness. *The Asian Journal of Professional & Business Studies*, 6(2), 1–13.
<https://doi.org/10.61688/ajpbs.v6i2.412>

Copyright © 2025 The Author(s)

Published by Universiti Poly-Tech Malaysia. This is an open-access article under the Creative Commons Attribution (CC BY 4.0) licence: <https://creativecommons.org/licenses/by/4.0/legalcode>

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 national statistics indicate strong overall graduate employability in Malaysia. The Ministry of Higher Education reported an overall graduate employability rate of 94.2% in 2022 (MOHE, 2022). However, this aggregate figure should not be interpreted as an ECE-specific employment rate because the available national reporting does not sufficiently disaggregate outcomes for Early Childhood Education graduates. The reviewed literature nevertheless raises concerns about underemployment, job-role mismatch, workplace readiness, and retention in early childhood settings (Nur Amalina & Seman, 2023; Zhang et al., 2025). These limitations underscore the need for ECE-specific tracer data and more direct evidence from employers and graduates.

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 programs 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 centers.

2.3 Employer Perspectives and Industry Expectations

Employers in the ECE sector tend to prioritize 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-specialized or private education institutions.

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

2.4 The Role of Curriculum and Practical Training

Curriculum design is a major factor influencing employability outcomes. In the Malaysian context, many ECE programs 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?

5. METHODOLOGY

This scoping review followed established methodological guidance for scoping studies (Arksey & O'Malley, 2005; Levac et al., 2010) and used PRISMA-ScR reporting recommendations to improve transparency (Tricco et al., 2018). Eligibility criteria, database searching, screening, data extraction, and descriptive thematic synthesis were organised to address the research objectives and research questions. Empirical studies, institutional reports, policy documents, and graduate tracer evidence were prioritised, while editorials and opinion pieces without an empirical basis were excluded. The selection process was informed by current scoping-review guidance (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 program 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 the 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 Qualifications 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

The screening record reported that 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

Summary tables were used to present recurring findings on skill gaps, employer expectations, graduate preparedness, curriculum support, and research gaps. These outputs are linked to the corresponding research questions.

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

6. FINDINGS

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

National graduate tracer data indicate high overall graduate employability within six months of graduation, but the available evidence does not provide a sufficiently disaggregated ECE-specific employment rate. The reviewed literature nevertheless reports concerns about underemployment, job-role mismatch, and low-paid positions within parts of the early childhood sector (MOHE, 2022; Zhang et al., 2025). Some reviewed sources also suggest that stronger practicum exposure and institutional support are associated with better transition into employment, although the evidence remains limited.

There is also limited national tracking of ECE-specific outcomes such as job satisfaction, retention, career progression, and upward mobility. Accordingly, the available evidence is more useful for identifying recurring employability concerns than for estimating a precise national employment rate for ECE graduates.

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 overall graduate employability reported nationally; an ECE-specific rate is not isolated in the available tracer data	MOHE (2022)
Underemployment	Reviewed literature reports job-role mismatch and low-wage positions, but ECE-specific prevalence is not established	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, hesitation 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 national graduate employability is reported as high, the evidence reviewed does not establish a precise ECE-specific employment rate. The literature instead points to concerns about job-role mismatch, low-wage positions, and uneven transition into the ECE workforce. The lack of disaggregated ECE data in national tracer studies limits institutional efforts to monitor workforce integration and long-term career trajectories (MOHE, 2022; Zhang et al., 2025). More refined ECE-specific tracking would therefore strengthen planning and evaluation.

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 reviewed literature is the difficulty of translating academic preparation into professional practice. Reported challenges include classroom management, behavioural regulation, and parent engagement, all of which are difficult to develop without sufficient practical exposure (Norsita et al., 2020). These findings support the value of practicum and simulation components, while the limited ECE-specific evidence means that broader claims about turnover or burnout should be interpreted cautiously.

7.4 Institutional and Curricular Influences (RQ4)

Institutions that integrate experiential learning, such as structured practicum placements, mentoring, and teaching simulations, are more likely to provide opportunities for graduates to apply knowledge in realistic settings. However, such practices are not consistently implemented across institutions. Limited collaboration between training providers and ECE employers can also reduce curriculum responsiveness to workplace needs (Deding & Minnaert, 2024). Digital pedagogy is another area requiring greater attention as technology becomes more common in early childhood settings.

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

The reviewed evidence suggests that higher education institutions should strengthen employer input, structured practicum, and digital upskilling within ECE programmes. National agencies such as MOHE could also refine graduate tracking mechanisms to capture ECE-specific outcomes. Public-private partnerships may provide a useful platform for curriculum consultation and workplace learning. These recommendations should be treated as directions derived from the reviewed literature rather than as effects directly tested in this scoping review.

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 could strengthen structured practicum within ECE programmes and formalise employer-university consultation so curricula can be reviewed regularly for workplace relevance. Digital

pedagogy training may also help address emerging technology requirements in preschools. In addition, an ECE-specific tracer mechanism would improve the monitoring of employment, retention, and professional growth. These measures are consistent with the gaps identified in the reviewed literature and should be evaluated through future empirical research.

8. CONCLUSION

This scoping review synthesises literature on the employability of Early Childhood Education graduates in Malaysia, with emphasis on employer perspectives, market readiness, and curriculum alignment. The evidence indicates recurring concerns about underemployment, skill mismatch, and workplace readiness, although national data remain insufficiently disaggregated to establish a precise ECE-specific employability rate.

Across the reviewed sources, employers and education-sector literature emphasise technical and soft competencies such as communication, child-centred pedagogy, emotional intelligence, professional attitudes, and digital literacy. Reported gaps in practical experience and confidence support the need for stronger practicum, experiential learning, and collaboration between educational institutions and industry stakeholders.

The review also identifies important evidence gaps, including limited ECE-specific tracer data, insufficient employer participation in curriculum development, and a lack of longitudinal tracking of graduate career progression. Interpretation should remain cautious because the available evidence includes both ECE-specific and broader education-graduate studies, and several areas remain under-researched in the Malaysian context.

Future research should therefore prioritise direct employer and graduate evidence, clearer sector-specific employment indicators, and longitudinal assessment of career outcomes. Strengthening graduate employability remains important for workforce sustainability and for supporting the delivery of high-quality early childhood education across Malaysia.

9. ACKNOWLEDGEMENT

The authors extend their sincere appreciation to Universiti Poly-Tech Malaysia (UPTM) for providing an academic environment conducive to research and scholarly inquiry. We are deeply grateful to our colleagues and peers whose constructive feedback and intellectual contributions have significantly enhanced the quality of this work.

The authors also acknowledge the published literature and institutional sources that formed the evidence base for this scoping review. The scholarly contributions of researchers and organisations whose work informed the synthesis are gratefully recognised.

10. 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.

11. AUTHOR CONTRIBUTION STATEMENT

All five authors contributed to the conceptualisation of the review, literature screening and synthesis, manuscript preparation, critical review, and approval of the final version.

12. ETHICS STATEMENT

This study is a scoping review based on published literature, institutional reports, and other documentary sources. It did not involve direct interaction with human participants, collection of identifiable personal data, clinical procedures, or experiments involving humans or animals. Therefore, formal ethical approval and informed consent were not required for this review. The authors sought to report and synthesise the reviewed evidence accurately and responsibly in accordance with academic research ethics.

REFERENCES

- Andersson, L., & Gustafsson, P. (2022). Integrated early childhood education systems: Lessons from Sweden. *International Journal of Early Childhood Education*, 45(3), 245–262.
- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32. <https://doi.org/10.1080/1364557032000119616>
- Deding, J., & Minnaert, A. (2024). Improving child outcomes and quality in early childhood education and care through implementation of professional development: A meta-systematic literature review of pre- and in-service approaches. *Advances in Social Sciences Research Journal*, 11(12), 33–65. <https://doi.org/10.14738/assrj.1112.17997>
- Ismail, A., Khalid, R., & Syed Omar, S. (2021). Revisiting graduate employability: A Malaysian perspective. *Journal of Education and Human Development*, 10(3), 34–44.
- Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science*, 5, 69. <https://doi.org/10.1186/1748-5908-5-69>
- Ministry of Education Malaysia. (2013). *Malaysia Education Blueprint 2013–2025*. Ministry of Education Malaysia.
- Ministry of Higher Education Malaysia (MOHE). (2022). *Graduate Tracer Study Report*. Ministry of Higher Education Malaysia.
- Morshidi, S., et al. (2012). Graduate employability skills: Employer perspectives. *Malaysian Journal of Higher Education*, 9(1), 1–18.
- Norsita, M. I., Rahmat, M. N., & Aziz, A. A. (2020). Practical teaching readiness among Early Childhood Education graduates. *Journal of Early Childhood Studies*, 5(2), 102–116.
- Nur Amalina, M. Z., & Seman, N. A. (2023). Employer feedback on ECE graduate soft skills. *Malaysian Journal of Child Development*, 8(1), 55–72.
- Peters, M. D. J., Marnie, C., Tricco, A. C., Pollock, D., Munn, Z., Alexander, L., McInerney, P., Godfrey, C. M., & Khalil, H. (2020). Updated methodological guidance for the conduct of scoping reviews. *JBIM Evidence Synthesis*, 18(10), 2119–2126. <https://doi.org/10.11124/JBIES-20-00167>
- Razalli, N. H., Zainal, S. N., & Latif, R. A. (2025). Competency gaps in early childhood graduates: A multi-centre employer study. *Asia-Pacific Education Review*, 16(1), 25–39.
- Saleh, N. A., & Wahab, H. A. (2024). Employer expectations in Malaysia's preschool sector. *Journal of Educational Management and Leadership*, 13(2), 77–90.
- Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M. D. J., Horsley, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M. G., Garritty, C., ... Straus, S. E. (2018). PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine*, 169(7), 467–473. <https://doi.org/10.7326/M18-0850>
- Yen, C. H., Tan, K. S., & Lim, A. Y. (2023). Soft skills deficiencies among Malaysian graduates. *Journal of Graduate Employability*, 7(3), 120–135.
- Zhang, L. Y., Wong, S. Y., & Ali, A. (2025). Digital readiness of Early Childhood Education graduates. *Malaysian Journal of Digital Learning*, 4(1), 1–15.