



The Pedagogy Inherent in Japan's Early Childhood Education Curricula by Bibliometric Analysis

Rie Takahashi^{1*}, Yeni Rachmawati¹, Naomi Takasawa²

¹Early Childhood Teacher Education Department, Universitas Pendidikan Indonesia, Indonesia

²Senior Researcher, International Development Center of Japan (IDCJ), Japan

✉ Author Corresponding: rie.takahashi2025@upi.edu

ABSTRACT

The establishment of the Child and Family Agency in 2023 marked a critical turning point in Japan's early childhood education and care (ECEC) system. However, systematic empirical evidence on the pedagogical foundations of Japanese ECEC curricula remains limited. This study employs a systematic bibliometric review aimed at exploring the structural characteristics and dominant pedagogical frameworks of ECEC curriculum under institutional transformation. In accordance with the PRISMA guidelines, a comprehensive literature review of 972 papers identified by the Publish or Perish tool with a focus on Google Scholar was conducted, encompassing publications from 2022 to 2025. The primary research instrument employed was VOSviewer, a software program designed for analysing scientific literature. This software enabled the execution of two key research methodologies: keyword co-occurrence mapping and conceptual clustering. The findings reveal that pedagogy, curriculum and children are the central pillars of the Japanese ECEC curricula. Distinct conceptual clusters emerge, including the close association between play and care, as well as patterns reflecting indirect education (*Kansetsu Kyoiku*). Additionally, a significant discrepancy is observed between the national curriculum and its implementation in practice. In conclusion, this study offers three key contributions. Firstly, it provides a visual taxonomy that bridges the gap between abstract national policy and actual research trends. Secondly, it identifies a significant conceptual discrepancy between the 'intended curriculum' and the 'practised curriculum', highlighting a critical area for future qualitative inquiry. Finally, it provides an empirical basis for culturally embedded educational logics, thereby offering a new theoretical framework for international comparative ECEC research.

Keywords: Japanese kindergarten curriculum, Pedagogical Identity, Indirect Education, Learning through Environment.



Article History:

Received: 08-01-2026

Revised : 24-02-2026

Accepted: 03-03-2026

Online : 01-04-2026

How to Cite (APA style):

Takahashi, R., Rachmawati, Y., & Takasawa, N. (2026). The Pedagogy Inherent in Japan's Early Childhood Education Curricula by Bibliometric Analysis. *IJECA (International Journal of Education and Curriculum Application)*, 9(1), 140-156. <https://doi.org/10.31764/ijeca.v9i1.37573>



This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license

1. INTRODUCTION

Japanese early childhood education and care (ECEC) system has recently garnered significant international attention for its child-centered pedagogical approach ([Organisation for Economic Co-operation and Development \(OECD\), 2021](#)). However, Japan faces profound systemic challenges that resonate with global educational dilemmas. While over 90% of children aged 3 to 5 are enrolled in ECEC facilities, achieving universal (100%) enrollment remains an elusive goal, leaving a vulnerable segment of the population underserved ([Ministry of Education, Culture, Sports and Technology \(MEXT\), 2018](#)). Furthermore, the socio-economic status of preschool

educators and the persistent wage gap compared to other professions are critical concerns (National Institute for Educational Policy Research, 2018). Against this backdrop, Japan is undergoing a period of structural transformation, symbolised by the establishment of the Child and Family Agency in 2023. It signifies a national commitment to ECEC reform that transcends traditional ministerial boundaries and bureaucratic silos (The Cabinet of Japan, 2021a).

This transition entails the complex coexistence and integration of conventional kindergartens and nurseries within the "Integrated Centre for Early Childhood Education and Care (ECEC)," reflecting a move toward administrative unification (The Cabinet of Japan, 2021b). It is essential to recognise that this structural integration of nursery and kindergarten has been debated since the Meiji period (1868-1912), when nurseries and kindergartens were established as separate systems (Noda, 2010). Currently, Japan's preschool education facilities are categorised by the governing body into three primary types: kindergartens under the Ministry of Education, Culture, Sports, Science and Technology (MEXT), and both nurseries and integrated children's centres under the recently established Child and Family Agency (CFA). The 2023 reform, therefore, is not merely a bureaucratic shift but a historical resolution of a long-standing academic and social conflict regarding the nature of early childhood (Noda, 2010).

To ensure conceptual clarity in this complex institutional landscape, this paper establishes specific terminological definitions based on the prevalent academic discourse. This study uses the term 'kindergarten' to encompass various forms of childcare settings, without distinguishing significantly among kindergarten (*youchien*), nursery schools (*hoikujyo*), and childcare centres (*takujisyo*), reflecting their shared functional role in the current welfare-education nexus. Furthermore, the term 'Integrated centre for early childhood education and care (ECEC)' is employed to refer to the *youho renkei gata nintei kodomo en*, representing the hybrid nature of these institutions. Within the broader definition of curriculum studies, these facilities are governed by three distinct guidelines: the Kindergarten Education Guidelines, the Nursery Care Guidelines, and the Integrated Centre Guidelines, which were revised and standardised in 2017 to ensure a degree of pedagogical coherence (Koyama, 2017; Uchida, 2020). Despite this standardisation, the legal basis for each remains distinct, leading to the perception that childcare is in a state of disarray, as the notion of childcare is becoming increasingly complex to comprehend (Kamiduki, 2023).

Despite the extensive range of qualitative studies conducted on Japanese educational methodology, there is a paucity of research that has comprehensively integrated data on the evolution of the curriculum research field (Akita et al., 2007). Conventional comparative education research on Japan has been noted for its tendency toward detailed description and limited theoretical reference, focusing primarily on institutional levels rather than pedagogical methodology (Yamada, 2016). Furthermore, studies on early childhood education account for a small fraction – approximately 2% – of the total extant literature on Japanese education (Hamano, 2021; Yamada, 2016). However, the 2023 study stated that research based on the premise that the curriculum has been harmonised across infant education and childcare facilities, including kindergartens and nurseries, is on the increase (Nakata et al., 2023). The lack of systematic integration poses a significant challenge for international researchers seeking to understand the structural changes and thematic shifts in the Japanese ECEC landscape. Consequently, there is an urgent need for a methodologically rigorous review that can map the intellectual territory of Japanese ECEC and provide a clear trajectory of its scholarly development.

Bibliometric analysis provides a robust framework for understanding the structure of research themes and identifying emerging trends from a large and complex body of literature

(Donthu et al., 2021). However, metadata downloaded from literature search sites frequently contains a substantial amount of inappropriate or duplicated information, necessitating a transparent and systematic filtering process (Odu et al., 2024). The present paper employs a PRISMA-based bibliometric analysis in order to ensure methodological robustness and transparency, thereby minimising the risk of bias that is inherent in traditional narrative reviews (Page et al., 2021; Tricco et al., 2018). The employment of visualisation techniques, such as keyword co-occurrence mapping, facilitates the objective identification of the "conceptual core" of the field and its peripheral emerging topics (Donthu et al., 2021). Such a scientific approach is vital for moving beyond descriptive accounts and providing an empirical foundation for future comparative education research and international ECEC policy discourse.

The scientific contribution of this research comprises two aspects: firstly, it addresses Japan's regional context; secondly, it contributes to the broader international discourse on early childhood education and curriculum reform. Firstly, an examination of academic literature from 2022 to 2025 was conducted, with the objective of providing empirical evidence. This analysis resulted in the highlighting of uniquely Japanese educational rationales, such as "indirect education" and "education through the environment". Secondly, by demonstrating how cultural and historical contexts – which are often overlooked in standardised international assessments – shape the "curriculum in practice", it challenges universalist assumptions in curriculum research (Martín-Alonso et al., 2021; Sato et al., 2017). By visualising the discrepancy between policy-driven frameworks and practised pedagogies, this research challenges ECEC systems. This analysis emphasises the significance of investigating culturally specific educational methodologies in the worldwide pursuit of educational quality and equity.

The primary objective of this study is to systematically elucidate the characteristics of Japanese research on early childhood education curriculum through a comprehensive bibliometric mapping approach. In order to achieve this objective, the study will address the following three primary research questions: (1) Identify the principal themes and pedagogical concepts that have emerged in recent academic literature on the curriculum for ECEC in Japan; (2) Establish visual representations of the relationships between the identified keywords and the pedagogical concepts; (3) Conceptualise the relationship between the national curriculum, as revised in 2017, and practical pedagogical approaches; and (4) Facilitate a re-examination of novel research topics and their practical implications for the future of early childhood education policy and international comparative education. The objective of this research is to furnish practitioners, policymakers, and international researchers seeking to comprehend the intricate interplay of culture, policy, and educational practice with valuable insights. The present study conducts a comprehensive conceptual analysis of the current state of early childhood education in Japan, based on data.

2. METHODS

The study employs a mixed-methods research design, integrating a systematic literature review (SLR) with quantitative bibliometric analysis. Adhering to the PRISMA 2020 guidelines (Kamioka et al., 2021; Page et al., 2021), this dual approach ensures methodological rigour, transparency, and reproducibility. The qualitative synthesis identifies thematic patterns and contextual factors within Japanese ECEC pedagogy, while the bibliometric analysis provides a quantitative mapping of research clusters and evolving academic discourses. This integrated strategy is intended to minimise subjectivity and enable a comprehensive identification of

"research gaps" that warrant further inquiry. This paper applies a bibliometric analysis through a systematic literature review. The following are some steps in the method used in this study.

2.1 Review Selection Criteria

To ensure consistency with the research objectives, the following eligibility criteria were strictly applied:

- a. Peer-reviewed: Only scholarly articles published in peer-reviewed journals were included to ensure data quality.
- b. Timeline: Publications from 2022 to December 2025 to capture the latest discourse following recent Japanese policy shifts.
- c. Source Type: Primary empirical studies only. Secondary data (Scoping/Systematic reviews) were excluded to avoid "double-counting" in bibliometric mapping.
- d. Context: Research must specifically focus on Early Childhood Education and Care (ECEC) within the Japanese educational context.

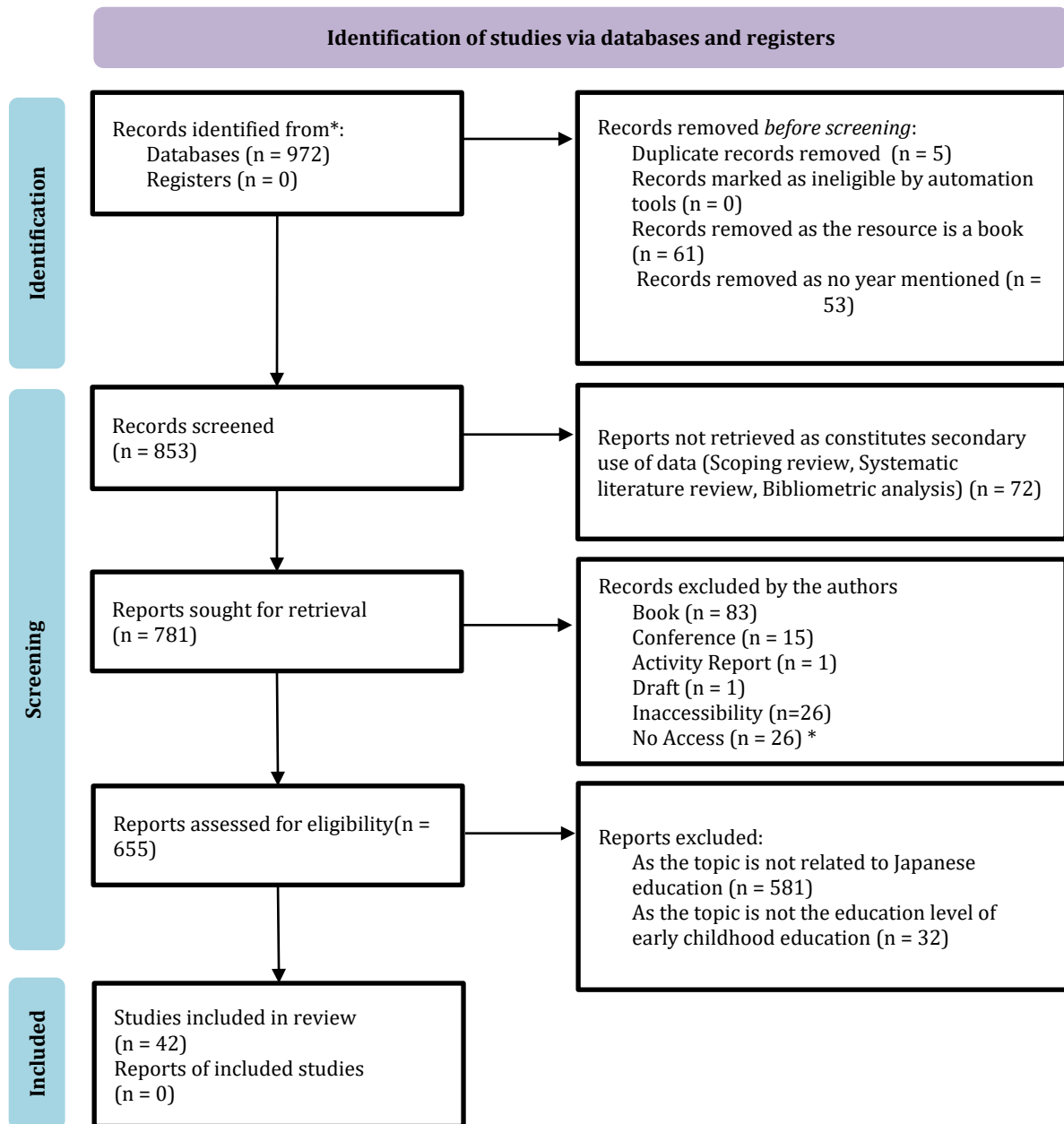
2.2 Search Strategy and Data Sources

In order to reduce the impact of data source bias, a comprehensive search was conducted on December 8, 2025, using the Publish or Perish software. Google Scholar was selected as the primary database due to its superior coverage of Japanese-language academic bulletins and regional journals, which are often underrepresented in Scopus but critical for capturing the "pedagogical logic in Japan". The search strings comprised combinations of: "Pedagogy", "Japan", "Curriculum", and "Early Childhood Education" in the paper's title. The maximum output data count was set to 1,000. The search yielded 972 results.

2.3 Data Extraction

- a. Identification (972 items identified)
Prior to screening, a total of 5 (five) duplicate records were identified and subsequently removed using Mendeley Data. Furthermore, based on peer-review criteria and data-acquisition considerations, 61 "book" resources and 53 records with blank "year" fields were deleted en masse without any content review.
- b. Initial Screening (Subjects: 853)
A total of 72 papers that met prerequisite (3) for secondary data use and employed methodologies such as Scoping Review, Systematic Literature Review, or Bibliometric Analysis were excluded.
- c. The Second Screening (781 items)
Titles, abstracts, and linked information from Publish or Perish were subjected to screening. The author proceeded to delete data for a total of 83 newly identified books, 15 conference proceedings and abstracts, 1 (one) activity report, and 1 (one) paper draft. Furthermore, 26 papers were deleted due to inaccessibility. This included items with incorrect links, literature in languages other than English, Japanese, or Indonesian for which content review was impossible, and papers in which the resource itself was unclear.
- d. The third screening (655 items).
In accordance with prerequisite (4) of the Japanese education context, 581 papers were excluded. In addition, 32 papers were excluded because early childhood education was not among the research subjects.

The 42 papers that met the predetermined criteria through the screening process were reviewed. At this stage, it should be noted that no screening was conducted to determine whether the papers mentioned the Japanese curriculum or focused specifically on pedagogy, as shown in Figure 1.



* No access includes: the link was unavailable, the language other than Japanese, Indonesian and English, no resource data found.

Figure 1. PRISMA 2020 Flow Diagram

2.4 Bibliometric Analysis Procedures (VOSviewer)

To ensure the reproducibility of the bibliometric mapping, the following parameters were applied in VOSviewer (version 1.6.20):

- a. Type of Analysis: Co-occurrence analysis was performed using "All Keywords" as the unit of analysis.
- b. Counting Method: The Full Counting method was employed to assign equal weight to each occurrence.
- c. Thresholding: A minimum keyword occurrence threshold of 2 was set to ensure the inclusion of emerging terms while filtering out noise.
- d. Purpose of Visualizations:
 - 1) Network Visualization: To identify the structural "conceptual core" and clusters of the research field.
 - 2) Overlay Visualization: To track the chronological evolution of keywords and identify the latest research trends (2022–2025).
 - 3) Density Visualization: To highlight the "intellectual density" and dominant themes (e.g., 'Care' and 'Environment') within the Japanese ECEC discourse.

3. RESULT AND DISCUSSION

3.1 Publication Trends and Influence

Of the 42 papers analysed, [Bautista et al. \(2024\)](#) recorded the highest citation count at 114 (Table 1). After analysing productivity and influence power ([Takahashi, 2021](#)), we present the mapping results and analyse those findings. The literature extracted in this paper is from 2022 onward, with a distribution across 2022–2025 (Table 2). 19 out of 42 studies are conducted in Japan, followed by those conducted by researchers from Australia, China and the United States. Regarding the regional overview, five papers came from Northern European countries. As demonstrated in Table 3, a significant proportion of the journals in which these papers were published are internationally recognised academic journals, including *Sustainability* (Q1) and *Comparative Education* (Q1).

Table 1. Top 10 Cited Articles

No	Cites	Authors	Title	Year	Source	Publisher
1	114	Bautista et al.	Music in early childhood teacher education: Raising awareness of a worrisome reality and proposing strategies to move forward	2024	Arts Education Policy Review	Taylor & Francis
2	46	Hosokawa et al.	Enhancing social-emotional skills in early childhood: intervention study on the effectiveness of social and emotional learning	2024	BMC psychology	Springer
3	45	Iwasaki	Effects of environmental education on young Children's water-saving behaviors in Japan	2022	Sustainability	Multidisciplinary Digital Publishing Institute (MDPI)
4	30	Akiba	Computational thinking and coding for young children: A hybrid	2022	Education Sciences	Multidisciplinary Digital Publishing Institute (MDPI)

No	Cites	Authors	Title	Year	Source	Publisher
			approach to link unplugged and plugged activities			
5	18	Gunnestad et al.	Values in Early Childhood Education (ECE): A cross-cultural comparative study of values for ECE expressed in policy documents	2022	ECNU Review of Education	SAGE
6	16	Nakatsubo et al.	Why Don't Japanese Early Childhood Educators Intervene in Children's Physical Fights? Some Characteristics of the Mimamoru Approach	2022	Early Childhood Education Journal	Springer
7	15	Hayashi	Teaching expertise in three countries: Findings and policy implications from an international comparative study in early childhood education	2022	Comparative Education	Taylor & Francis
8	15	Bang et al.	L2 learning outcomes of a research-based digital app for Japanese children	2024	Studies in Second Language Acquisition	Cambridge University Press
9	14	Matsumoto et al.	Pedagogical photo documentation for play in early childhood education and care	2023	Early Years	Taylor & Francis
10	11	Friman et al.	Nurturing Eco-Literate Minds: Unveiling the Pathways to Minimise Ecological Footprint in Early Childhood Education	2024	Social Sciences	Multidisciplinary Digital Publishing Institute (MDPI)

Table 2. Year of Issue

Year	No. of literatures
2022	14
2023	7
2024	9
2025	12
Total	42

Table 3. Countries of Literature

Rank	Country	Area*	No. of Literatures
1	Japan	Eastern Asia	19
2	Australia	Australia and New Zealand	3
3	China	Eastern Asia	3
3	USA	Northern Amerika	3
5	Finland	Northern Europe	2
5	Norway	Northern Europe	2
5	Phillippines	Southeastern Asia	2
8	Georgia	Western Asia	1

Rank	Country	Area*	No. of Literatures
8	Indonesia	Southeastern Asia	1
8	Israel	Western Asia	1
8	Kazakhstan	Central Asia	1
8	Malaysia	Southeastern Asia	1
8	New Zealand	Australia and New Zealand	1
8	Sweden	Northern Europe	1
8	Uzbekistan	Central Asia	1

*The area division was based on the UN's M49 Standard (United Nations, n.d.).

Table 4. Top 5 Journals/Bulletins and the indicators

No	Journals/Bulletin	Publisher	Country	No. of Literatures	SJR2024	
1	Sustainability (Switzerland)*	Multidisciplinary Digital Publishing Institute (MDPI)	Switzerland	3	0.688	Q1
2	Annual Bulletin of the Japanese Society for the Study of Teacher Education	Japan's teacher education research body	Japan	2		
2	Comparative Education*	Routledge	UK	2	1.237	Q1
2	Docens Series in Education	Docens Journal	India	2		
2	Early Childhood Education Journal*	Springer	Netherland	2		
2	Journal of Early Childhood Research*	SAGE	UK	2		

3.2 Bibliometric Mapping Analysis

The overall landscape of the research field is captured through three primary visualisations (Figures 2, Figures 3, and Figures 4). The keyword co-occurrence analysis, based on a minimum threshold of two occurrences, identified 37 significant terms categorised into six distinct clusters (see Table 5).

a. Evolution of Research Trends (Overlay and Density Analysis)

The Overlay Visualisation (Figure 3) reveals a clear chronological shift in research priorities. Whilst studies undertaken in 2022–2023 were characterised by international comparisons and pedagogy, publications scheduled for 2025 (indicated in yellow) demonstrate an increasing focus on "educational goals," "philosophy," and "case studies." This development signifies a progression in the field, transitioning from general comparative descriptions to an examination of the philosophical underpinnings of kindergarten practice. The Density Visualisation (see Figure 4) further corroborates the intellectual core. The highest concentration of research (indicated by intense yellow) is centred around the tripartite nexus of 'Early Childhood Education,' 'Japan,' and 'Pedagogy.' This demonstrates that the literature is not merely reporting practices but is fundamentally concerned with the pedagogical logic inherent in the Japanese context.

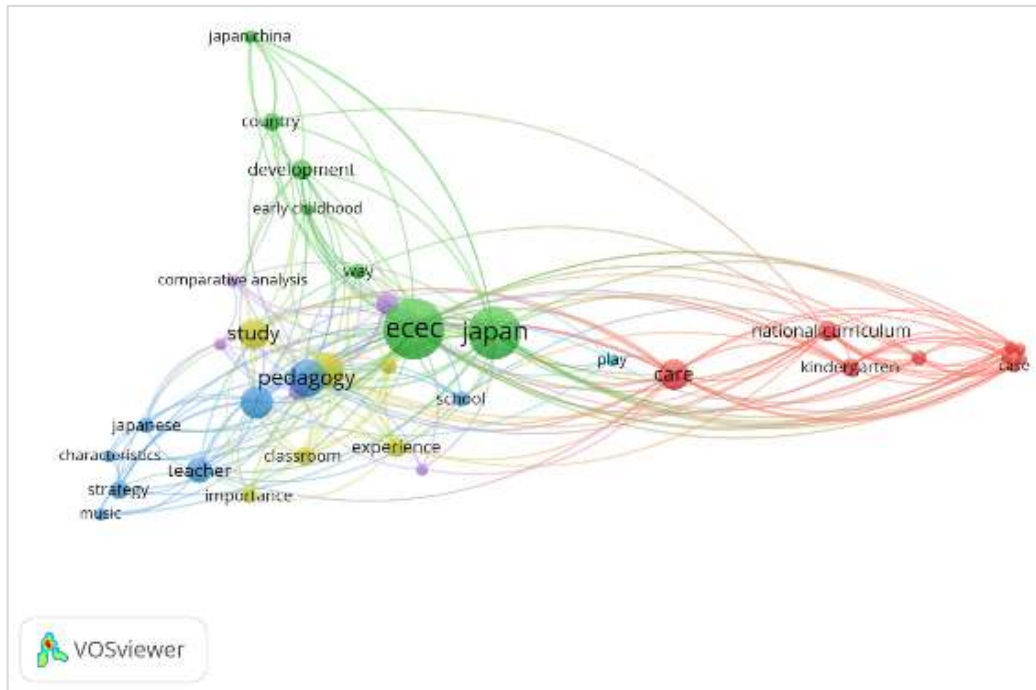


Figure 2. Network Visualisation

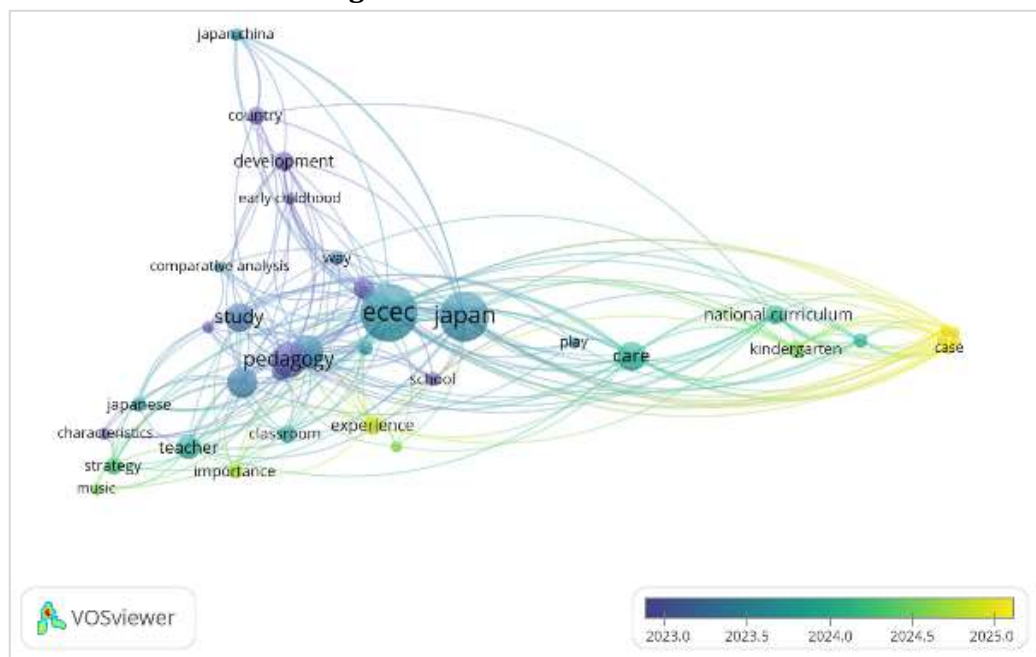


Figure 3. Overlay Visualisation

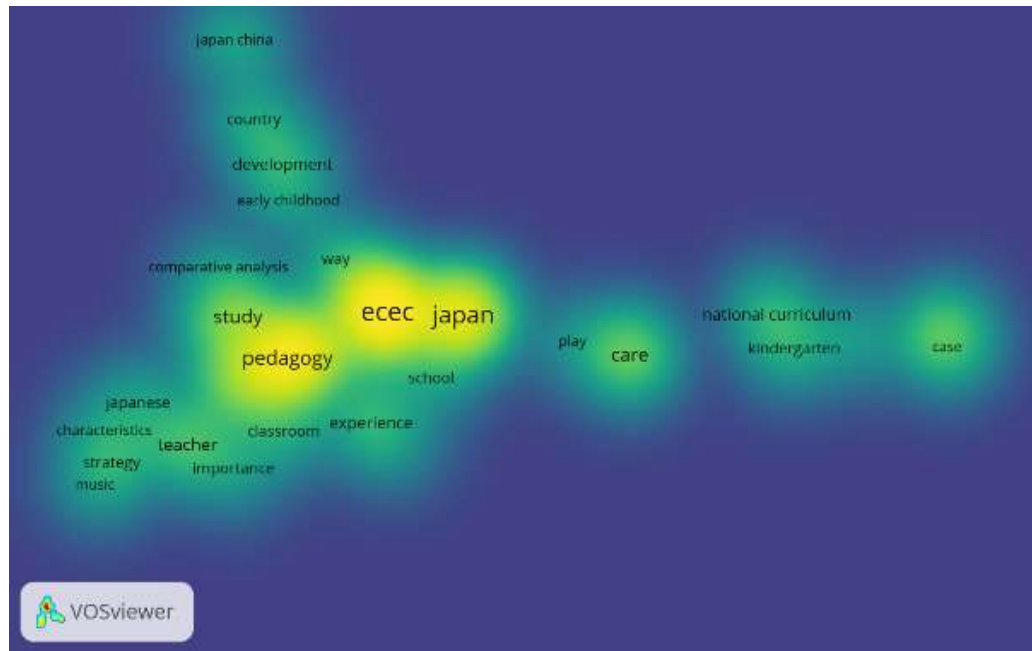


Figure 4. Density Visualisation

b. Inter-Cluster Relationships and Pedagogical Logic

The co-occurrence analysis of 37 keywords resulted in six clusters (Table 5). The following sections integrate these bibliometric indicators with qualitative interpretations of Japanese pedagogical logic. Cluster 6 comprised only the term 'play'. Although it was considered part of the same category as 'pedagogy' or 'practice', I ultimately decided to establish it as an independent cluster. The reason for the independence of the word 'play' in early childhood education is that 'play' is synonymous with 'learning,' and the Japanese curriculum framework is mainly used to illustrate the interconnectedness between 'learning' through the correlation diagram. Educational goals are fully met through play-centred instruction, encouraging learning through play as a natural activity of the child (Organisation for Economic Co-operation and Development (OECD), 2021).

Table 5. Cluster and Keywords

Cluster	Colour	Keyword	Total
1	Red	Care, case, educational philosophy, environment, kindergarten, national curriculum, pedagogical goal, space	8 words
2	Green	Country, development, early childhood, ECEC (early childhood education (and care)), Japan, Japan-China, United States, way	8 words
3	Blue	Characteristics, curriculum, Japanese, music, pedagogy, school, strategy, teacher	8 words
4	Yellow	Child, classroom, experience, importance, research, study	6 words
5	Purple	Activity, comparative analysis, paper, practice, quality	6 words
6	Light blue	Play	1 word

1) Education through the Environment (Cluster 1)

As shown in Figure 5 and Figure 6, 'Kindergarten' and 'National Curriculum' are positioned at the structural core of Cluster 1. The central placement of 'Environment' between these terms empirically substantiates the Japanese principle of 'Education through the Environment' (MEXT), 2018; Ministry of Education Culture Sports and Technology (MEXT), 2017). The approach to environmental education in Japan is based on the expectation that early childhood education and care should be provided from the child's perspective. The role expected of staff is to provide a supportive environment that encourages children to initiate and develop activities they have chosen themselves (Organisation for Economic Co-operation and Development (OECD), 2021).

2) 'Care' as a Bridge (Cluster 1 & 6)

A particularly salient finding concerns the mediating role of 'care'. As Figures 6 and 11 show, 'care' links key concepts such as 'pedagogy', 'curriculum', and 'child' with institutional terms including 'kindergarten' and 'national curriculum'. This indicates that care operates as a conceptual bridge connecting practice, policy, and pedagogy, rather than a peripheral value. The proximity of "play" to "care" empirically supports the view that children's learning in Japan is inseparable from teachers' relational and emotional engagement. This finding is consistent with Noddings' assertion that caring relationships form the basis of meaningful education (Mondal & Ghosh, 2025; Noddings, 1992), and is in line with current debates on democratic and relational pedagogy (Kitayama et al., 2022; Mondal & Ghosh, 2025).

3) Pedagogy, Children, and the Logic of Indirect Education (Clusters 3 & 4)

In Cluster 3, the proximity between 'Pedagogy', 'Child', and 'Activity' (Figure 7 and Figure 8) indicates that Japanese scholarship conceptualises learning as a lived experience enacted through daily activities. A particularly salient finding is the absence of a direct link between 'Child' and 'Play' (Figure 9). Rather than a lack of play-based learning, this spatial gap reflects the traditional philosophy of 'Indirect Education' (*Kansetsu Kyoiku*). As articulated by Sozo Kurahashi, educational intent is embedded in the teacher-designed environment rather than through direct instruction (Murai, 2022; Uchida et al., 2025). 'Indirect Education' by Sozo Kurahashi is the same concept of 'Education through the Environment' (Kuwahara, 1992). The bibliometric mapping confirms that this "indirect" relationship remains the dominant pedagogical structure in the current literature.

4) The Disconnect between 'Curriculum' and 'National Curriculum' (Clusters 3 & 4)

A significant conceptual divide was identified through the distance between 'National Curriculum' and 'Curriculum' (Figure 11). While the 'National Curriculum' is clustered with administrative terms, the generic term 'Curriculum' is positioned closer to teachers and pedagogy (Figure 7). This distinction provides empirical evidence of the gap between the 'intended curriculum' (policy level) and the 'lived/practised curriculum' (classroom level) (Martín-Alonso et al., 2021; Sato et al., 2017). This suggests that current ECEC research in Japan prioritises how teachers interpret and reconstruct policies in their local contexts, highlighting the agency of practitioners in the face of national frameworks.

5) The Disconnect between 'Curriculum' and 'National Curriculum' (Clusters 3 & 4)

The overlay visualisation (see Figure 5) demonstrated that research by 2025 had undergone a shift towards "educational objectives" and "philosophy". Yamada (2016) observed that conventional comparative education research on Japan up to 2011 has been characterised by a tendency towards detailed description, limited theoretical grounding, and a focus on institutional and structural levels rather than classroom practice or pedagogical methodology. The 2025 shift in research focus towards "educational goals" and "philosophy" suggests a verification grounded in the theoretical basis of Japan's child-centred approach. Within the context of the recently established Child and Family Agency, these findings arguably advocate for a qualitative evaluation system that respects the integrated nature of "play and childcare" and the qualitative "living curriculum", rather than rigid institutional compliance.

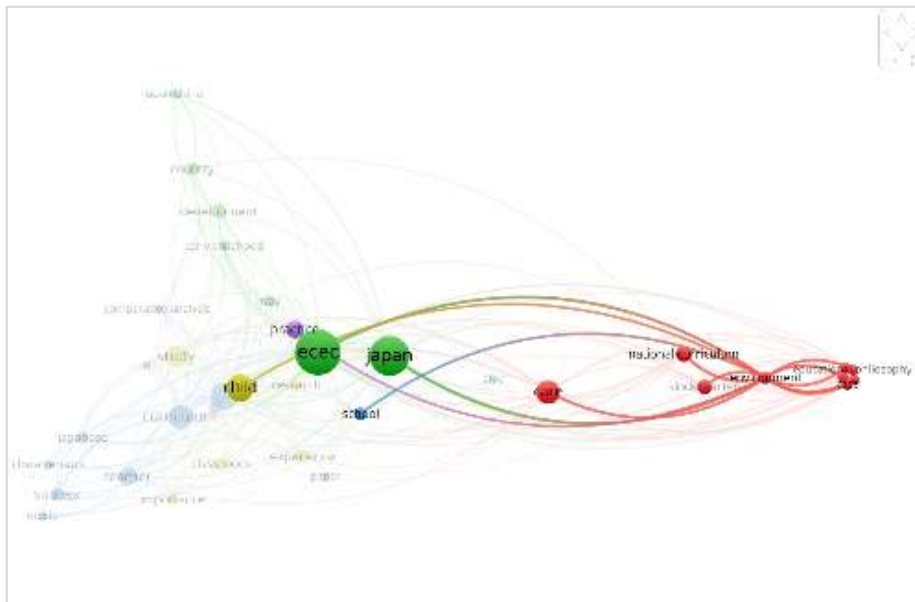


Figure 5. Cluster 1 (red): Centre of the cluster. 'environment'.

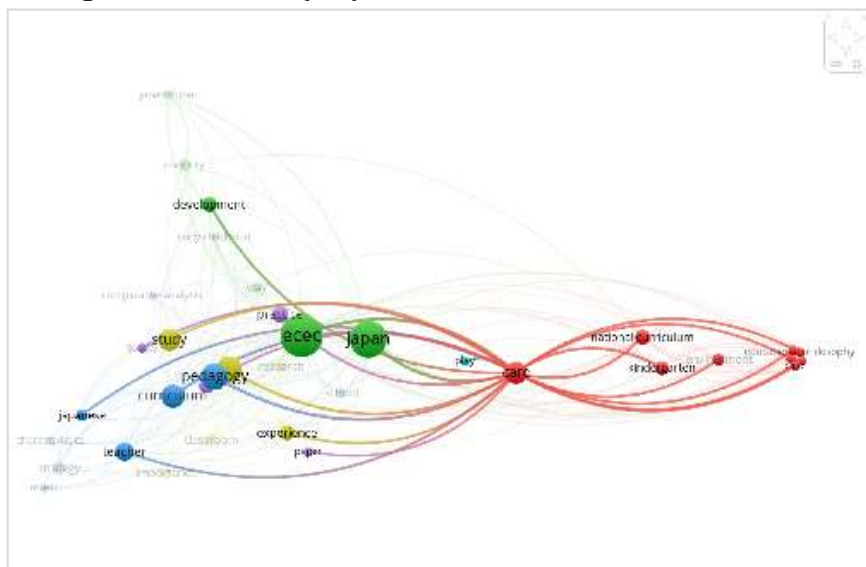


Figure 6. Cluster 1 (red): 'Care' formulates the relationship with other clusters.

should employ qualitative case studies to explore how individual teachers interpret and reconstruct the national curriculum in their daily practice. Overall, the empirical insights provided by this study deepen international understanding within curriculum research and call into question universalist assumptions that overlook culturally embedded pedagogical logics. By foregrounding the philosophical and cultural foundations of early childhood education in Japan, this research underscores the decisive importance of historical and cultural context in educational inquiry.

ACKNOWLEDGEMENT

I extend my heartfelt gratitude to my supervisor, Ms Yeni Rachmawati, for her invaluable contributions in deepening my understanding of research methodologies. I am also grateful to my fellow students who introduced me to this bibliometric approach. Furthermore, I wish to express my profound appreciation to my home institution and funding bodies for their support in advancing this research. Finally, I extend my deepest gratitude to Mr Eisuke Saito, who has supported my research for many years and provided the impetus for me to enter the world of research.

REFERENCES

- Akiba, D. (2022). Computational thinking and coding for young children: A hybrid approach to link unplugged and plugged activities. *Education Sciences*, 12(793), 1–7. <https://doi.org/10.3390/educsci12110793>
- Bang, H. J., Setoguchi, E., Mackey, A., & Fujii, A. (2024). L2 learning outcomes of a research-based digital app for Japanese children. *Studies in Second Language Acquisition*, 46, 504–534. <https://doi.org/10.1017/S0272263124000147>
- Bautista, A., Yeung, J., McLaren, M. L., & Ilari, B. (2024). Music in early childhood teacher education: Raising awareness of a worrisome reality and proposing strategies to move forward. *Arts Education Policy Review*, 125(3), 139–149. <https://doi.org/10.1080/10632913.2022.2043969>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Friman, H., Banner, I., Sitbon, Y., Sahar-Inbar, L., & Shaked, N. (2024). Nurturing eco-literate minds: Unveiling the pathways to minimize ecological footprint in early childhood education. *Social Sciences*, 13(187), 1–17. <https://doi.org/10.3390/socsci13040187>
- Gunnestad, A., Mørreaunet, S., & Chahboun, S. (2022). Values in early childhood education (ECE): A cross-cultural comparative study of values for ECE expressed in policy documents. *ECNU Review of Education*, 5(4), 577–600. <https://doi.org/10.1177/20965311221109842>
- Hamano, T. (2021). International trends in early childhood education and care [Yoji kyoiku/hoiku no kokusai teki doukou]. *Japan Comparative Education Society (JCES)*, 63, 2–17. https://doi.org/10.5998/jces.2021.63_2 (in Japanese)
- Hayashi, A. (2022). Teaching expertise in three countries: Findings and policy implications from an international comparative study in early childhood education. *Comparative Education*. <https://doi.org/10.1080/03050068.2022.2069327>
- Hosokawa, R., Matsumoto, Y., Nishida, C., Funato, K., & Mitani, A. (2024). Enhancing social-emotional skills in early childhood: intervention study on the effectiveness of social and emotional learning. *BMC Psychology*, 12(761), 1–19. <https://doi.org/10.1186/s40359-024-02280-w>
- Iwasaki, S. (2022). Effects of environmental education on young children's water-saving behaviors in Japan. *Sustainability*, 14(3382), 1–15. <https://doi.org/10.3390/su14063382>

- Kamiduki, T. (2023). Comparative analysis of the “Explanatory notes on the kindergarten education curriculum guidelines”, “Explanatory notes on the integrated ECE center’s curriculum guidelines”, and “Explanatory notes on the nursery center’s curriculum guidelines” – Focusing. *Bulletin of the Faculty of Human Development and Education*, 19, 231–241. http://repo.kyoto-wu.ac.jp/dspace/bitstream/11173/3701/1/0080_019_022.pdf (in Japanese)
- Kamioka, H., Kaneko, Y., Tsutani, K., Nakayama, T., & Origasa, H. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews (Japanese Translation). *Japan Pharmacol Ther*, 49(6), 831–842. <https://doi.org/10.1136/bmj.n71>
- Kitayama, Y., Hashizaki, Y., & Osler, A. (2022). The ethics of care as a pedagogical approach: Implications for education for democratic citizenship. *Educational Studies in Japan*, 16, 31–43. <https://doi.org/10.7571/esjkyoiku.16.31>
- Koyama, S. (2017). A study into the rationale and challenges of the revised 2017 national childcare and education guidelines. *The Faculty Journal of Komazawa Women's Junior College*, 51, 9–24. https://komajo.repo.nii.ac.jp/record/1315/files/02_koyama.pdf (in Japanese)
- Kuwahara, A. (1992). S. Kurahashi’s Methodology in Early Childhood Education (1) – Growing Process of “Indirect Education” Theory –. National Association for the Study of Educational Methods, 18, 151–158. <http://ci.nii.ac.jp/naid/120000855761/ja/> (in Japanese)
- Martín-Alonso, D., Sierra, E., & Blanco, N. (2021). Relationships and tensions between the curricular program and the lived curriculum. A narrative research. *Teaching and Teacher Education*, 105(103433), 1–8. <https://doi.org/10.1016/j.tate.2021.103433>
- Matsumoto, H., Nishiu, H., Taniguchi, M., Kataoka, M., & ... (2023). Pedagogical photo documentation for play in early childhood education and care. *Early Years*. <https://doi.org/10.1080/09575146.2021.2017407>
- (MEXT), M. of E. C. S. S. and T. (2018). *Explanatory notes of kindergarten education curricula [Yochien Kyoiku Yoryo Kaisetu] (March 2018)* (pp. 1–257). https://www.mext.go.jp/content/1384661_3_3.pdf (in Japanese)
- Ministry of Education Culture Sports and Technology (MEXT). (2017). *Guidelines for kindergarten education (Notified in March 2017, effective from April 2018) [Yochien kyoiku youryou]* (pp. 1–19). https://www.mext.go.jp/content/1384661_3_2.pdf (in Japanese)
- Ministry of Education Culture Sports and Technology (MEXT). (2018). *Reference materials concerning the provision of free early childhood education [Youji kyouiku no musyouka ni kakaru sankou shiryou]* (pp. 0–15). https://www.mext.go.jp/component/a_menu/education/detail/_icsFiles/afieldfile/2019/03/20/1414592_003_1.pdf (in Japanese)
- Mondal, S., & Ghosh, S. (2025). Revisiting the pedagogical aspects of Nel Noddings: A critical study. *The Social Science Review A Multidisciplinary Journal*, 3(1), 51–55. <https://doi.org/10.70096/tssr.250301009>
- Murai, N. (2022). Teacher expertise in kindergarten education as a provider of education that takes place through the environment. *Japan Society for Teacher Education*, 31, 88–98. https://doi.org/10.32292/jsste.31.0_88 (in Japanese)
- Nakatsubo, F., Ueda, H., & Kayama, M. (2022). Why don’t Japanese early childhood educators intervene in children’s physical fights? Some characteristics of the mimamoru approach. *Early Childhood Education Journal*, 50, 627–637. <https://doi.org/10.1007/s10643-021-01184-3>
- National Institute for Educational Policy Research. (2018). *OECD International Survey of Early Childhood Education and Care Personnel 2018 Report: Towards High-Quality Early Childhood Education and Care - Key Findings* (pp. 1–9). https://www.nier.go.jp/youji_kyouiku_kenyuu_center/oecd.html (in Japanese)
- Noda, A. (2010). *The Background to the Debate on Integrating Nursery and Kindergarten Services and Challenges in System Design: Based on the Outline of the Basic System Proposal for the*

- New Child and Childcare System* (Number 311, pp. 3–20). House of Councillors: Research and Information.
https://www.sangiin.go.jp/japanese/annai/chousa/rippou_chousa/backnumber/20101201.html (in Japanese)
- Noddings, N. (1992). *The challenge to care in schools: An alternative approach to education [Gakkou ni okeru care no chosen: Mou hitotsu no kyouiku o motomete]* (M. Sato et al, Trans.) (2nd ed.). Yumiru Publishing.
- Organisation for Economic Co-operation and Development (OECD). (2021). *Starting Strong VI: Supporting meaningful interactions in early childhood education and care*.
<https://doi.org/10.1787/f47c0b88-en>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372(n71). <https://doi.org/10.1136/bmj.n71>
- Sato, M., Akita, K., Shirouzu, H., Fujimura, N., Ishii, T., Saito, Y., Kodama, S., Imai, Y., Yamauchi, Y., & Taguma, M. (2017). *A learning and curriculum [Manabi to kariyuramu]* (K. Akita, Ed.; 2nd ed.). Iwanami Shoten, Publisher.
- Takahashi, T. (2021). The current state of management research employing a quantitative bibliometric approach [Keiryoushoshigakuteki apuro-chi o mochiita maneijimotokenkyu]. *Musashino University Academic Institutional Repository*, 53–112.
<https://mu.repo.nii.ac.jp/records/1576> (in Japanese)
- The Cabinet of Japan. (2021a). *Basic Policy on a New Framework for Advancing Children's Policies —Establishing the Ministry for Children and Families to Build a Child-Centred Society— [Kodomo Seisaku no arantana suishin Taisei ni kansuru kihon houshin]*.
<https://www.cfa.go.jp/about>
- The Cabinet of Japan. (2021b). *Basic Policy on the New Framework for Promoting Children's Policies (Cabinet Decision, 21 December 2021) [Kodomo seisaku no aratana suishin taisei ni kansuru kihon houshin]*. <https://www.cfa.go.jp/about> (in Japanese)
- 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>
- Uchida, C. (2020). Changes and challenges for Japanese early childhood teacher education in the early 21st century: The effects of globalization and renewed responsibilities for early childhood teacher educators [Hoikusya yousei katei no 21seiki syotou no henka to kadai: Gr. *Annual Bulletin of the Japanese Society for the Study on Teacher Education*, 31, 54–62.
https://doi.org/10.32292/jsste.31.0_54 (in Japanese)
- Uchida, C., Koga, M., & Muto, T. (2025). Initiatives in Japan to Enhance Common Understandings of the High-Quality Early Childhood Education and Care. ... *Childhood Pedagogical Practices Across the ...* https://doi.org/10.1007/978-981-96-2747-9_19
- United Nations. (n.d.). *Standard country or area codes for statistical use (M49)*. Retrieved <https://unstats.un.org/unsd/methodology/m49>
- Yamada, S. (2016). Patterns in Japanese Comparative Education Practices : A Contrast with North America and Greater China. *Educational Studies in Japan*, 10(March), 5–17.
<https://doi.org/10.7571/esjkyoiku.10.5>