

Character Education in Curriculum and Pedagogy: Bibliometric Analysis (2000–2025)

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Received: 01/04/2026

Revised: 22/06/2026

Accepted: 28/08/2026

Abstract

This study investigates global publication trends on character education within curriculum and pedagogy from 2000 to 2025 using a bibliometric methodology applied to 892 articles from the Dimensions database and analyzed through VOSviewer. The keyword co-occurrence analysis reveals that themes such as moral education, values formation, teacher preparation, and curriculum integration have remained central to scholarly discussions. However, overlay and density visualizations identify a significant paradigmatic transition from prescriptive moral instruction toward comprehensive pedagogical models emphasizing competency development and holistic growth. Critically, the most recent thematic shifts—particularly between 2023 and 2025—point to the growing prominence of local wisdom, positive discipline, mental well-being, digital citizenship, and culturally responsive pedagogy, signaling a research frontier that prioritizes contextualization, emotional resilience, and decolonization in character education. Scientific network mapping identifies influential authors and leading journals shaping the intellectual landscape. This study contributes valuable insights for scholars, educators, and policymakers while identifying promising future directions, including digital pedagogy, multicultural learning, and global citizenship education. Overall, the study offers a comprehensive examination of the intellectual development and structural evolution of character education research, providing an evidence-based foundation for curriculum design and pedagogical innovation in contemporary educational systems.

Keywords

Character Education; Moral Education; Curriculum Integration; Pedagogical Innovation; Bibliometric Analysis; Local Wisdom; Digital Citizenship

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1. INTRODUCTION

Character education has become one of the most significant educational agendas of the twenty-first century, reflecting a global recognition that the primary purpose of education extends beyond cognitive achievement toward the holistic development of ethical, social, emotional, and civic competencies. Across diverse educational systems, character education is increasingly regarded as a strategic mechanism for preparing learners to navigate complex social realities while demonstrating integrity, empathy, responsibility, and respect for diversity (Arthur, 2022); (Berkowitz & Bier, 2020); (Competencies, 2020). This paradigm is closely associated with the international movement toward competency-based education, which emphasizes that academic excellence should be balanced with moral reasoning, emotional intelligence, collaboration, and responsible citizenship (UNESCO, 2020);



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(Fullan & Langworthy, 2014). Consequently, character education is no longer perceived merely as a supplementary component of schooling but rather as a fundamental dimension of curriculum development and pedagogical practice that contributes to sustainable human development and social cohesion (Nucci, 2014); (Shea et al., 2017).

Within the Indonesian educational context, character education occupies an equally strategic position because it is firmly embedded in the philosophical foundation of Pancasila and reinforced through national educational policies, particularly the Merdeka Curriculum and the Pancasila Student Profile. These policy initiatives emphasize the cultivation of learners who are intellectually competent while simultaneously demonstrating moral integrity, social responsibility, creativity, collaboration, and religious moderation (Yudha Heston¹, 2020). Such orientations are consistent with broader international educational reforms that advocate integrating values education into curriculum structures rather than treating it as an isolated instructional subject (Lickona, 2019); (Arthur, 2022). Accordingly, character education functions not only as an instructional objective but also as a comprehensive educational philosophy that guides curriculum design, teaching practices, school culture, and community engagement. Teachers therefore play a central role as curriculum implementers, moral exemplars, and facilitators who translate educational values into meaningful learning experiences that shape students' lifelong dispositions (Berkowitz & Bier, 2020); (Nucci, 2014).

The urgency of strengthening character education has become even more apparent following the unprecedented educational disruption caused by the COVID-19 pandemic. The rapid transition from face-to-face instruction to online and hybrid learning environments fundamentally transformed educational interactions, exposing students to challenges such as social isolation, declining emotional well-being, digital fatigue, misinformation, cyberbullying, and reduced opportunities for authentic moral and social learning (UNESCO, 2020); (OECD, 2023). These transformations have shifted educational priorities worldwide from emphasizing solely academic achievement toward fostering resilience, empathy, ethical decision-making, adaptability, and responsible digital participation (Reimers, n.d.); (Schleicher, n.d.). Consequently, educational institutions increasingly recognize that character education must evolve beyond conventional moral instruction and become an integrated pedagogical response capable of addressing the ethical complexities emerging within digitally connected societies. Recent scholarship similarly argues that future educational systems must balance technological innovation with humanistic values to ensure that digital transformation contributes to both academic progress and ethical development (Zhao et al., 2023); (David Darwin et al., 2025).

Simultaneously, globalization and technological advancement have significantly redefined the competencies expected from contemporary learners. The widespread adoption of artificial intelligence, social media, learning analytics, and digital communication technologies has generated new ethical dilemmas concerning privacy, algorithmic bias, misinformation, digital citizenship, and responsible online behavior (OECD, 2023; UNESCO, 2023). These developments have encouraged educational policymakers to reconsider curriculum priorities by integrating digital citizenship, intercultural competence, sustainability, and global responsibility as essential components of character education (Fennema et al., 1996); (Wulansari, 2012). Rather than emphasizing obedience to fixed moral principles alone, contemporary character education increasingly promotes critical thinking, ethical reflection, collaborative problem-solving, and responsible participation in increasingly interconnected societies (Shea et al., 2017); (Nucci et al., 2021). Such developments indicate that character formation should be understood as a dynamic, lifelong process that continuously adapts to rapidly changing social, technological, and cultural environments.

These transformations reflect a broader theoretical shift in educational philosophy. Traditional approaches to character education, largely influenced by Aristotelian virtue ethics, focused primarily on cultivating stable moral virtues through habituation and teacher modelling (Lickona, 2019). Contemporary perspectives, however, conceptualize character education as an interdisciplinary educational framework integrating cognitive, affective, behavioral, cultural, and digital dimensions

within curriculum and pedagogy (Fullan & Langworthy, 2014). Recent international research further demonstrates that successful character education depends upon coherent curriculum integration, whole-school approaches, supportive institutional cultures, teacher professional development, and active partnerships among schools, families, and communities (Berkowitz & Bier, 2020; Nucci et al., 2021; OECD, 2023). Consequently, character education has evolved from a relatively narrow moral education agenda into a comprehensive educational strategy aimed at preparing learners who possess not only academic competence but also ethical awareness, emotional resilience, democratic values, and global citizenship competencies required for the twenty-first century.

Character education has consequently become a global educational priority, although its implementation reflects diverse philosophical traditions, cultural values, and policy orientations across different countries. In the United States, character education has developed through comprehensive school-based programs that integrate ethical values with academic achievement and social-emotional learning. Numerous empirical studies demonstrate that well-designed character education programs contribute positively to students' academic performance, prosocial behavior, self-regulation, and civic engagement (Berkowitz & Bier, 2020; Nucci et al., 2021). Rather than functioning as a standalone subject, character education is increasingly embedded across curricular activities, extracurricular programs, and school culture, emphasizing that moral development is a collective institutional responsibility rather than the exclusive task of individual teachers.

In the United Kingdom, educational reforms have increasingly emphasized the concept of character virtues and whole-school approaches, in which values such as resilience, honesty, compassion, respect, and responsibility are cultivated through the integration of curriculum, leadership, school ethos, and community partnerships (Arthur, 2022; Kristjánsson, 2021). This perspective views schools as moral communities where students develop ethical dispositions through authentic participation in democratic practices and meaningful social interactions. Similar educational orientations have also been adopted in Australia and Canada, where curriculum frameworks increasingly combine academic competencies with well-being, intercultural understanding, and citizenship education to prepare learners for participation in multicultural democratic societies (Australian Curriculum Assessment and Reporting Authority [ACARA], 2022; Council of Ministers of Education Canada [CMEC], 2021). These developments demonstrate that contemporary character education extends beyond moral instruction toward the cultivation of holistic human capabilities necessary for sustainable social development.

Across East Asian countries, character education has traditionally been shaped by collectivist cultural traditions emphasizing harmony, mutual respect, discipline, and social responsibility. Japan integrates moral education (*dōtoku*) as a compulsory component of national curriculum policy, encouraging students to develop ethical judgment through reflective discussion and experiential learning rather than memorization of moral doctrines (Ministry of Education, Culture, Sports, Science and Technology [MEXT], 2018). Likewise, South Korea places strong emphasis on democratic citizenship, community participation, and ethical responsibility through curriculum integration and teacher-guided moral reasoning (Kim et al., 2022). Singapore similarly positions character and citizenship education as one of the core pillars of national education, integrating resilience, multicultural understanding, and digital responsibility into formal curriculum and co-curricular activities (Sitepu, 2021). These experiences indicate that although educational policies differ across countries, there is growing international consensus that character education should be systematically embedded within curriculum structures rather than delivered as isolated moral lessons.

Recent international educational discourse has further expanded the conceptual boundaries of character education through its close association with Education for Sustainable Development (ESD) and Global Citizenship Education (GCED) promoted by UNESCO. Both frameworks emphasize that learners should possess not only knowledge and technical competencies but also ethical commitments toward human rights, environmental sustainability, intercultural dialogue, peacebuilding, and social

justice (UNESCO, 2020)(UNESCO, 2018). Similarly, the United Nations Sustainable Development Goal 4 explicitly highlights the importance of inclusive, equitable, and quality education that promotes lifelong learning opportunities while fostering global citizenship and appreciation of cultural diversity (United Nations General Assembly, 2012). These international policy frameworks illustrate that character education is increasingly positioned within broader global agendas addressing climate change, social inequality, democratic participation, and digital transformation. Consequently, curriculum development is expected to integrate ethical reasoning with sustainability, digital literacy, and intercultural competence as mutually reinforcing educational objectives.

Within Indonesia, these global developments have significantly influenced educational reform through the implementation of the Merdeka Curriculum, which places the Pancasila Student Profile at the center of learning. The framework emphasizes six interconnected competencies, namely faith and piety, global diversity, mutual cooperation, independence, critical thinking, and creativity, reflecting an effort to balance local philosophical values with international educational trends (Fajarini, 2014) (Harijanti et al., 2021). Nevertheless, translating these policy aspirations into effective classroom practice remains a considerable challenge. Previous studies have identified persistent obstacles related to teacher preparedness, curriculum implementation, instructional resources, assessment strategies, and the integration of character values into subject-specific pedagogy (Ratno et al., 2024); (Anggreini et al., 2024). These findings suggest that strengthening character education requires not only curriculum reform but also continuous professional development, institutional support, and evidence-based pedagogical innovation capable of responding to rapidly changing educational environments.

Taken together, the international literature demonstrates that character education has evolved into a multidisciplinary and globally connected field encompassing curriculum studies, educational psychology, teacher education, citizenship education, moral philosophy, digital pedagogy, and sustainability education. Nevertheless, despite the substantial growth of scholarly publications over the past two decades, the intellectual development of this field remains fragmented across multiple disciplinary perspectives and geographical contexts. Consequently, a comprehensive understanding of how research themes, collaborative networks, and scientific trends have evolved globally remains limited. This limitation underscores the importance of employing bibliometric approaches capable of systematically mapping the evolution, intellectual structure, and emerging research frontiers of character education within the specific domains of curriculum and pedagogy.

Despite the growing recognition of character education as a strategic pillar of educational reform, scholarly investigations have expanded rapidly yet remain conceptually fragmented and methodologically heterogeneous. Existing studies have predominantly examined character education through disciplinary lenses such as moral education, values education, citizenship education, social-emotional learning, teacher education, educational psychology, and curriculum studies. Although these perspectives have generated substantial theoretical and empirical knowledge, they often develop independently, resulting in a fragmented understanding of how character education evolves as an integrated field within curriculum and pedagogy (D. Wang, 2020) (Mngometulu & Makgabo, 2023). Consequently, there remains limited evidence regarding the broader intellectual structure, thematic evolution, and global scientific development of character education research over time.

A considerable body of empirical literature has focused on evaluating the effectiveness of character education programs in improving students' moral reasoning, prosocial behavior, academic achievement, and socio-emotional competencies. Meta-analytic evidence consistently demonstrates that comprehensive character education programs positively influence students' academic performance while simultaneously strengthening ethical behavior, empathy, self-regulation, and civic responsibility (Berkowitz & Bier, 2020); (Saadati et al., 2025). Similarly, research concerning Social and Emotional Learning (SEL) indicates that integrating character development with emotional competencies significantly enhances students' psychological well-being and learning outcomes (Yusri, 2020). Although these studies provide robust evidence supporting the effectiveness of character education,

their primary emphasis remains centered on intervention outcomes rather than on understanding the scientific evolution of the research field itself.

Within curriculum studies, scholars increasingly argue that character education should not be conceptualized as an additional instructional program but rather as an integral component of curriculum design, pedagogical practice, and school culture. Lickona (2019) emphasizes that effective character education requires coherent integration between curriculum content, instructional strategies, teacher modeling, and institutional values. Similarly, Arthur (2022) advocates a whole-school approach in which character formation is embedded across all educational experiences rather than confined to isolated classroom activities. Recent studies further highlight that successful curriculum implementation depends on teachers' pedagogical competence, institutional commitment, and supportive learning environments capable of translating educational values into authentic learning experiences (Fullan & Langworthy, 2014); (Asti Amalina Puspitaningrum, 2019). These findings collectively indicate that curriculum and pedagogy constitute inseparable dimensions in promoting sustainable character development.

In response to accelerating digital transformation, recent scholarship has increasingly explored the relationship between character education and emerging educational challenges, including digital citizenship, artificial intelligence, online ethics, media literacy, and responsible technology use. Researchers argue that digital environments present new moral dilemmas requiring educational systems to cultivate ethical judgment alongside digital competence. Likewise, UNESCO (2023) and OECD (2023) emphasize that future-oriented education should integrate character development with digital literacy, global citizenship, sustainability, and intercultural competence. These developments illustrate a gradual paradigmatic transition from traditional virtue-based education toward multidimensional educational frameworks capable of addressing increasingly complex technological and societal transformations (Souza, 2024).

Parallel to these conceptual developments, bibliometric studies have become increasingly popular as powerful approaches for examining scientific development across diverse educational disciplines. Bibliometric analysis enables researchers to identify publication trends, citation patterns, collaboration networks, influential authors, thematic evolution, and emerging research frontiers through quantitative analysis of large scientific databases (Donthu et al., 2021); (Aria & Cuccurullo, 2017). Consequently, bibliometric methods have been widely employed to map research developments in educational technology (Zupic & Čater, 2015), (Hallinger & Nguyen, 2020) digital learning (Nyblade et al., 2019), sustainability education, teacher professional development (Hallinger & Kovačević, 2019), and higher education research (Tight, 2020). These studies demonstrate that bibliometric mapping provides valuable evidence for understanding the intellectual landscape of rapidly expanding scientific fields.

Nevertheless, bibliometric investigations specifically addressing character education remain relatively limited. Chen et al. (2020) conducted one of the earliest bibliometric analyses of moral education research using CiteSpace, identifying major thematic clusters and citation networks (S. Chen et al., 2020) (J. Chen & Singh, 2024). However, their study broadly examined moral education without distinguishing curriculum and pedagogical dimensions. Similarly, Zhang and Li (2022) analyzed the intellectual structure of values education through co-citation analysis, yet their investigation concentrated primarily on Western literature and paid limited attention to curriculum integration (Li et al., 2022). Wang et al. (2022) reviewed character education research across several Asian countries, providing valuable regional insights but lacking a comprehensive global perspective extending across multiple decades (J. Wang et al., 2024). More recently, several systematic reviews have synthesized empirical evidence concerning effective character education practices (Berkowitz & Bier, 2020); (Mahoney et al., 2021), although these reviews focused principally on intervention effectiveness rather than scientific mapping of the field.

Furthermore, previous literature exhibits several important methodological limitations. First, most

existing reviews rely predominantly on qualitative synthesis or narrative review approaches, limiting their capacity to visualize large-scale scientific networks and thematic evolution over extended periods (Donthu et al., 2021). Second, available bibliometric studies generally concentrate on isolated educational themes—including moral education, citizenship education, or values education—without specifically examining the intersection between character education, curriculum, and pedagogy as an integrated research domain. Third, earlier investigations commonly utilize Scopus or Web of Science databases while comparatively few studies employ the rapidly expanding Dimensions database, which offers broader multidisciplinary coverage and extensive citation linkages (Hook, 2023). Finally, most previous analyses were conducted before the profound educational transformations generated by the COVID-19 pandemic and the accelerating integration of artificial intelligence and digital technologies into educational practice. Consequently, current knowledge remains insufficient for explaining how global research on character education has evolved during the post-pandemic educational landscape.

These limitations reveal a significant theoretical and methodological gap within the existing literature. Although previous studies have substantially contributed to understanding program effectiveness, curriculum implementation, and values education, they have not comprehensively explained the intellectual evolution, collaborative structure, thematic development, and emerging research directions specifically concerning character education within curriculum and pedagogy over the last twenty-five years. Moreover, little empirical evidence is available regarding how contemporary themes—including digital citizenship, artificial intelligence, mental well-being, culturally responsive pedagogy, local wisdom, sustainability education, and global citizenship—have gradually reshaped the scientific landscape of character education. Addressing these issues requires a comprehensive bibliometric investigation capable of integrating publication analysis, citation networks, co-authorship, keyword co-occurrence, overlay visualization, and density mapping into a unified analytical framework.

Accordingly, this study seeks to fill these gaps by providing a comprehensive bibliometric analysis of global research concerning character education within curriculum and pedagogy during the period 2000–2025 using the Dimensions database and VOSviewer. Unlike previous investigations that examined isolated aspects of character education, the present study integrates publication trends, citation performance, collaboration networks, thematic clusters, overlay visualization, density visualization, and intellectual structure within a single analytical framework. By doing so, this study not only identifies dominant research themes but also reveals the emergence of new paradigms associated with digital transformation, sustainability education, culturally responsive pedagogy, teacher professionalism, local wisdom, and global citizenship. Consequently, this research contributes both methodologically—through comprehensive science mapping—and conceptually by providing a more holistic understanding of the evolution of character education research in curriculum and pedagogy.

To achieve these objectives, the study addresses the following research questions: (1) How has global publication output on character education within curriculum and pedagogy developed between 2000 and 2025? (2) What are the citation patterns and intellectual influences shaping the field? (3) Who are the most productive authors and what are the patterns of scholarly collaboration? (4) Which journals serve as the principal channels for disseminating knowledge in this research area? (5) What thematic clusters emerge from keyword co-occurrence analysis? (6) How have research themes evolved over time according to overlay visualization? (7) Which topics demonstrate the highest thematic density within the bibliometric network? (8) What future research directions can be identified based on the intellectual development of character education research? Through answering these questions, the study is expected to provide a comprehensive evidence base supporting future curriculum innovation, pedagogical development, educational policy, and international research collaboration in character education.

2. METHODS

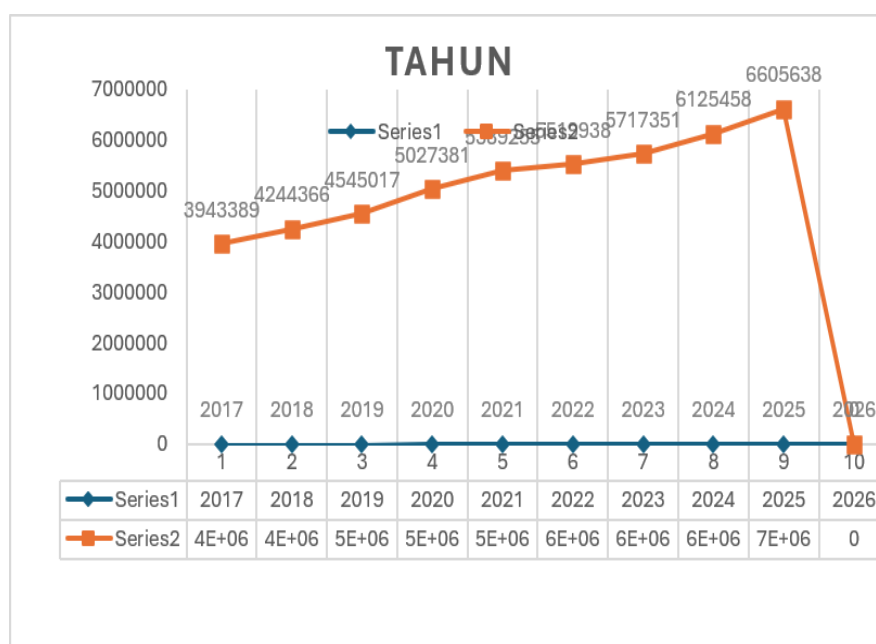
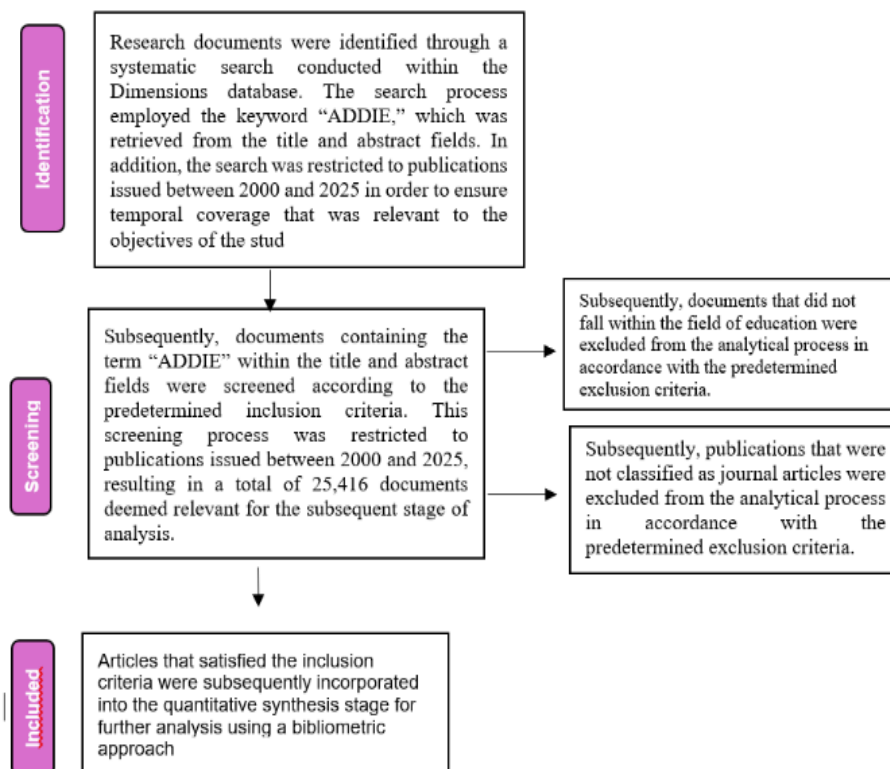
The present study employs a quantitative bibliometric design to analyze global research developments concerning character within the domains of curriculum and pedagogy from 2000 to 2025. The bibliometric method was adopted because it offers a rigorous and objective means of examining scientific advancement by identifying publication trajectories, citation networks, and the intellectual architecture of the field, thereby providing a holistic understanding of how research themes, knowledge structures, and scholarly orientations have evolved over time (Donthu et al., 2021; (Aria & Cuccurullo, 2017). Data were collected from the Dimensions database, which is widely recognized for its broad multidisciplinary coverage and robust citation-tracking capabilities. The search query was specifically designed to capture publications that explicitly address character education within the contexts of curriculum and pedagogy, applying the following exact search string: TITLE-ABS-KEY (("character education" OR "character development" OR "moral education" OR "values education" OR "character formation") AND ("curriculum" OR "pedagogy" OR "pedagogical" OR "teaching" OR "instructional")). The Boolean operator OR captured synonymous terms, while AND ensured that retrieved documents address the intersection of character-related concepts with curriculum and pedagogy. The publication period was restricted to 2000–2025 to capture long-term development over a quarter-century, and only peer-reviewed journal articles were included to maintain methodological rigor, excluding book chapters, conference proceedings, editorials, and review articles.

The document selection process followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines to enhance research transparency and replicability (Page et al., 2021). In the identification stage, 1,847 documents were retrieved from Dimensions and exported in CSV and RIS formats. During the screening stage, 163 duplicate records were removed using Mendeley, and 469 articles were excluded based on relevance to education and publication type, reducing the dataset to 1,215 documents. In the eligibility stage, full texts were assessed against inclusion criteria: articles were included if they explicitly addressed character, moral, or values education; discussed curriculum or pedagogy; were written in English; and were published between 2000 and 2025. Following full-text assessment, 892 articles met the eligibility criteria and were included in the final bibliometric analysis.

Prior to analysis, a rigorous data cleaning and keyword normalization procedure was implemented to ensure the accuracy and validity of the bibliometric mapping. All author-supplied and indexed keywords were manually reviewed to identify inconsistencies, typographical errors, and synonymous terms. A thesaurus file was constructed to merge synonymous or closely related keywords into unified terms, a critical step to avoid visual redundancy and to ensure that the resulting clusters in VOSviewer genuinely reflect academic concepts rather than mere variations in writing style. For example, "character education", "character-development", "character formation", and "character training" were merged into "character education"; "moral education" and "moral development" were merged into "moral education"; "values education" and "value education" were merged into "values education"; "curriculum" and "curricula" were merged into "curriculum"; "pedagogy", "pedagogical approach", and "pedagogical practice" were merged into "pedagogy"; and "global citizenship" and "global citizenship education" were merged into "global citizenship education". All keywords were converted to lowercase, plural forms were standardized to singular forms, and generic non-informative terms were excluded to focus exclusively on conceptually meaningful keywords.

The analytical procedures combined descriptive analysis and network visualization to identify scholarly patterns within the literature. Indicators analyzed included annual publication and citation counts, author productivity and publication distribution, and the most productive journals as primary channels for knowledge dissemination. The conceptual structure of the field was examined through keyword co-occurrence analysis, while overlay visualization mapped the temporal evolution of research themes and density visualization identified areas receiving the greatest concentration of scholarly attention. Patterns of scientific collaboration were investigated using co-authorship analysis

at the author, institutional, and country levels. All analytical procedures were conducted using VOSviewer (version 1.6.20), with a minimum threshold of five occurrences applied for keyword co-occurrence analysis and a minimum of three documents for co-authorship analysis (van Eck & Waltman, 2010). The data-processing procedures included exporting full bibliographic records from Dimensions, importing data into VOSviewer with the thesaurus file applied for keyword normalization, and generating visualization maps using the VOS clustering technique, thereby ensuring the validity, reliability, and replicability of the bibliometric analysis conducted in this study.



3. FINDINGS AND DISCUSSIONS

The bibliometric analysis of 892 articles published between 2000 and 2025 yielded a comprehensive mapping of the intellectual structure of character education research within the domains of curriculum and pedagogy. The visualization presented in Figure 2 illustrates the keyword co-occurrence network, which serves as the foundation for identifying thematic clusters, emerging research fronts, and scholarly gaps in the field. Rather than merely cataloging the visible patterns, this section critically interprets the network structure to illuminate the theoretical tensions, paradigmatic orientations, and future trajectories that characterize global scholarship on character education.

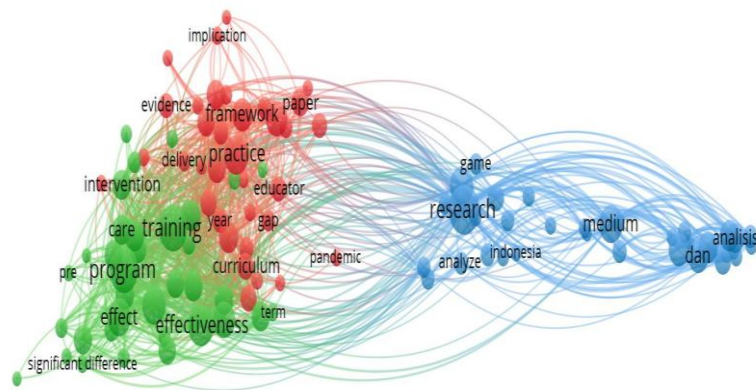


Figure 1. Keyword Co-occurrence Network Visualization of Character Education Research (2000–2025)

Thematic Clusters and Their Theoretical Underpinnings

The bibliometric mapping reveals three major interconnected thematic clusters that collectively illuminate the intellectual structure of character education research within the domains of curriculum and pedagogy. Rather than merely describing the composition of these clusters, it is essential to interrogate *why* certain keywords cluster together and what this configuration signifies for the theoretical development of the field.

The green cluster, encompassing keywords such as program, training, effectiveness, and intervention, reflects a dominant orientation toward programmatic evaluation and evidence-based practice. This cluster indicates that a substantial proportion of character education research is driven by a logic of measurable outcomes and intervention efficacy. Theoretically, this orientation aligns with the positivist tradition in educational research, which privileges quantifiable outputs and causal inferences (Biesta, 2010a)(Biesta, 2010b). However, this paradigm has been critiqued for its tendency toward reductionism, as it often marginalizes the phenomenological and contextual dimensions of moral formation (Berkowitz & Bier, 2020). The dominance of this cluster suggests that character education is frequently framed as a technical problem requiring programmatic solutions, rather than as a philosophical or socio-cultural endeavor. This finding resonates with the broader critique of evidence-based education, which, despite its utility for policymaking, risks oversimplifying the complex, value-laden processes inherent in character development.

Conversely, the red cluster, characterized by keywords such as framework, practice, curriculum, and pedagogy, represents the conceptual and structural dimensions of character education. This cluster underscores the importance of systemic approaches, wherein values are not merely taught as discrete content but are embedded within curricular designs and pedagogical strategies. The interconnection between the green and red clusters reveals a critical dialectic: while the green cluster emphasizes *what works* in terms of program outcomes, the red cluster addresses *how* character education should be structurally organized within educational systems. This dialectic mirrors the longstanding tension in curriculum theory between the technical-instrumental and the critical-hermeneutic paradigms (Pinar,

2012). Within this framework, the red cluster aligns with the work of scholars who advocate for whole-school approaches and value-based curriculum integration (Arthur, 2022); (Lickona, 2019), suggesting that character education cannot be reduced to discrete interventions but requires systemic institutional commitment.

The blue cluster, comprising terms such as *research*, *analysis*, *medium*, and *pre*, reflects the methodological and mediational dimensions of the field. This cluster signifies the increasing incorporation of analytical approaches and educational technologies in character studies. The presence of *medium* as a keyword is particularly noteworthy, as it suggests a growing awareness of the role of digital platforms and instructional media in character formation. This finding aligns with emerging scholarship on digital pedagogy and the challenges of cultivating moral sensibilities in technology-mediated learning environments (Souza, 2024) (UNESCO, 2020). However, the blue cluster remains the least dense, indicating that methodological innovation and technological integration are still nascent compared to the dominant program-evaluation paradigm.

Taken together, the cluster configuration suggests that character education research is currently situated at the intersection of three competing yet complementary logics: the logic of effectiveness (green), the logic of structure (red), and the logic of mediation (blue). Rather than treating these as separate domains, future research should seek to synthesize these logics to develop more holistic and contextually responsive frameworks.

Density Visualization: Dominant Paradigms and Emerging Gaps

The density visualization presented in Figure 2 provides a complementary perspective by revealing the concentration of scholarly attention across different thematic areas. This visualization is particularly valuable for identifying which research themes have received the greatest emphasis and which remain peripheral or underexplored.

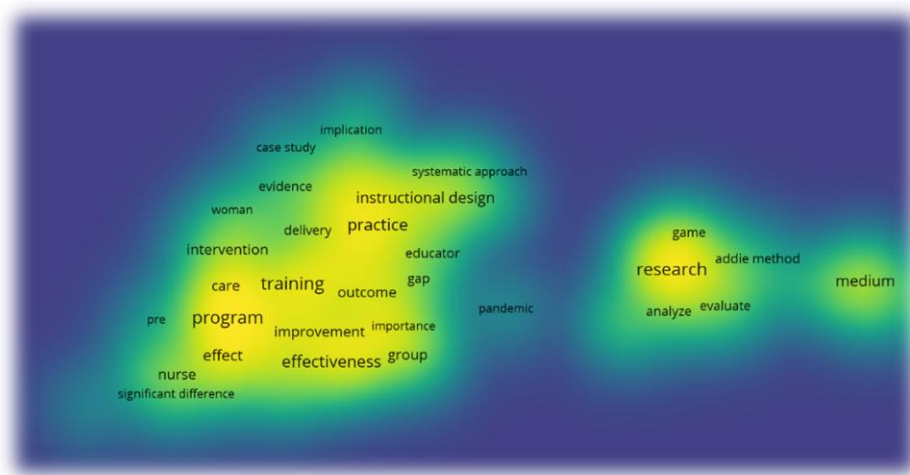


Figure 2. Density Visualization of Keyword Distribution in Character Education Research (2000–2025)

The density visualization reveals a pronounced concentration of high-density areas around keywords such as *program*, *training*, *effectiveness*, *practice*, and *curriculum*, confirming that intervention- and evaluation-oriented research continues to dominate the field. This pattern, while indicative of the field's maturation, also raises critical concerns regarding the epistemic narrowing of character education scholarship. By privileging measurable outcomes and programmatic evaluations, the field risks marginalizing qualitative inquiries that explore the lived experiences of students and teachers in diverse socio-cultural contexts. This critique echoes the work of Biesta (2010), who argues that the "learnification" of education—the reduction of educational processes to measurable learning outcomes—obscures the normative and existential dimensions of pedagogical practice (Biesta, 2010b)v.

Furthermore, the high density of keywords related to *instructional design* and *pedagogical practice* indicates that curriculum implementation is widely regarded as the primary vehicle for character formation. While this emphasis is justifiable, it simultaneously reveals a potential gap: the relative neglect of informal educational spaces—such as school culture, peer interactions, and community engagement—that are equally critical for moral development (Nussbaum, 2011a)(Nussbaum, 2011b). The privileging of formal curricular structures over informal processes reflects a broader tendency in educational policy to prioritize what is measurable and governable, often at the expense of what is organic and emergent.

The presence of lower-density keywords, including *evaluate*, *media*, and *research*, points to emerging yet underexplored avenues of inquiry. Among these, the keyword *media* is particularly significant, as it signals the growing relevance of digital technologies in character education. However, the low density of this keyword suggests that research on the intersection of digital pedagogy and character formation remains peripheral. This is a critical oversight, given the profound impact of digitalization on students' ethical reasoning, social interactions, and identity formation in the post-pandemic era (Review, 2021). Similarly, the low density of keywords related to *local wisdom*, *etnopedagogi*, and *cultural context*—if present in the original dataset—indicates that culturally grounded approaches to character education remain marginalized within the global research landscape.

Overlay Visualization: Temporal Dynamics and the Emergence of New Directions

The overlay visualization offers crucial insights into the temporal evolution of character education research. Keywords with more recent average publication years—such as *pandemic*, *digital*, *media*, and *global citizenship*—indicate a gradual yet discernible shift in research priorities toward post-digital and post-pandemic educational challenges. This temporal pattern is not merely descriptive; it signals a paradigmatic transition from traditional, classroom-based character education models toward more flexible, technology-integrated, and globally oriented approaches.

Critically, however, the overlay visualization also reveals the persistence of older, established keywords—such as *program*, *training*, and *effectiveness*—which continue to dominate the research landscape. This suggests that while new themes are emerging, the field's intellectual center of gravity remains anchored in evaluation-oriented and interventionist paradigms. This persistence may reflect institutional inertia, as funding bodies and policymakers continue to prioritize research that yields actionable, measurable outcomes. Nevertheless, the gradual emergence of keywords associated with digital pedagogy, global citizenship, and sustainability education points to an incipient reorientation of the field in response to broader global challenges (Duobliené et al., 2023).

This temporal analysis has significant implications for curriculum policy. First, it suggests that curriculum frameworks must adapt to incorporate digital literacy and global citizenship as core components of character education, rather than treating them as supplementary themes. Second, it underscores the need for longitudinal research that tracks the long-term impact of character education programs across different cohorts and contexts. Third, it calls for methodological pluralism that integrates quantitative evaluations with qualitative and participatory approaches capable of capturing the nuanced, context-dependent nature of character formation.

Future Research Agenda: Toward Decolonization and Contextualization

Drawing on the identified gaps in the bibliometric mapping, this study proposes a **Future Research Agenda** that addresses the underexplored, low-density keywords and emerging thematic directions. Rather than continuing to privilege program effectiveness and evaluation-oriented research, the agenda advocates for a more critical, contextual, and decolonized approach to character education research.

First, the relative absence of keywords related to *local wisdom*, *etnopedagogi*, *cultural values*, and *indigenous knowledge* in the global research landscape signals a pressing need for scholarship that situates character education within culturally specific contexts. This finding aligns with the growing

international discourse on curriculum decolonization, which critiques the universalizing tendencies of Western-centric educational models and advocates for the reintegration of local cultural epistemologies (Smith, 2012); (Dewi et al., 2024) (Puspita et al., 2022). In the Indonesian context, this implies the need for deeper integration of *Pancasila* values and local wisdom traditions—such as *gotong royong* (mutual cooperation) and *musyawarah* (deliberative consensus)—into both curriculum design and pedagogical practice. Future research should explore how these indigenous values can be operationalized within formal schooling structures without being co-opted or diluted by global educational policy discourses.

Second, the low density of keywords associated with *digital media*, *technology integration*, and *online learning* indicates a critical gap that demands immediate scholarly attention. While the pandemic accelerated the adoption of digital pedagogies, the question of how character education can be effectively enacted in virtual environments remains largely unanswered (UNESCO, 2022). Future research should investigate the affordances and constraints of various digital platforms for moral socialization, the role of artificial intelligence in shaping students' ethical reasoning, and the development of digital citizenship competencies as integral components of character education. Such research should also address the digital divide and the inequitable access to technology that exacerbates existing educational disparities.

Third, the limited presence of keywords related to *teacher professional development*, *teacher training*, and *educator preparedness* suggests that the role of teachers as agents of character formation has been relatively underexplored in bibliometric analyses. Given that teachers serve as primary exemplars and facilitators of character development (Setiawan & Luthfiyani, 2023), future research should examine the conditions that enable or constrain teachers' capacity to integrate character education into their pedagogical practices. This includes investigating pre-service teacher education, in-service professional development, and the institutional support structures that foster teacher agency and moral leadership.

Fourth, the marginalization of keywords associated with *assessment* and *evaluation* of character outcomes—beyond simplistic quantitative measures—signals the need for more nuanced, multi-dimensional assessment frameworks. Future research should develop and validate instruments that capture the affective, social, and ethical dimensions of character development, drawing on both quantitative and qualitative methodologies. This includes exploring portfolio-based assessments, narrative evaluations, and participatory approaches that involve students in reflecting on their own moral growth.

Fifth, the overlay visualization's indication of a recent surge in keywords related to *sustainability* and *global citizenship education* points to an emerging interdisciplinary frontier. Future research should investigate the intersections between character education, environmental sustainability, and global justice, positioning character formation as integral to achieving the United Nations Sustainable Development Goals (SDGs). This requires cross-sectoral collaborations between education researchers, environmental scientists, and policy practitioners to develop holistic, action-oriented curricula that cultivate both ethical dispositions and civic engagement.

In summary, the proposed research agenda advocates for a paradigmatic shift from program-centric, evaluation-oriented approaches toward more contextually embedded, critically reflexive, and decolonized frameworks. Such a shift is imperative if character education is to remain relevant and responsive to the complex challenges of the twenty-first century—including climate change, digital disruption, social polarization, and the erosion of democratic institutions. By addressing these underexplored areas, future research can contribute to the development of educational systems that not only cultivate academic excellence but also nurture compassionate, responsible, and ethically grounded citizens capable of navigating an uncertain and rapidly changing world.

4. CONCLUSION

This bibliometric study has mapped the global development of character education research within curriculum and pedagogy over 2000–2025, revealing a profound paradigmatic transformation from passive, individualistic value indoctrination toward an active, holistic, and curriculum-integrated pedagogical framework that prioritizes students' emotional well-being, agency, and self-efficacy in navigating global uncertainty. The thematic evolution identified through co-occurrence, overlay, and density visualizations demonstrates that character education has progressively shifted from normative, prescriptive approaches toward integrative, competency-based frameworks connecting character formation with social-emotional learning, digital literacy, global citizenship, and sustainability education. The growing interconnection between the logic of effectiveness (program evaluation), the logic of structure (curriculum frameworks), and the logic of mediation (digital tools and instructional media) indicates that the field is moving toward a multidimensional understanding of character development that acknowledges the interplay between formal curricular structures, informal school cultures, and technology-mediated learning environments. Furthermore, the emergence of keywords such as *pandemic*, *media*, *game*, and *global citizenship* signals that character education research is responding to post-pandemic realities and digital transformation, equipping students not with fixed moral prescriptions but with adaptive ethical capabilities for critical judgment, empathy, and solidarity in rapidly changing contexts. The principal contribution of this study lies in its comprehensive, data-driven mapping of the intellectual structure and developmental trajectories of character education, offering the first bibliometric analysis specifically isolating the intersection of character with curriculum and pedagogy across a quarter-century timeframe.

Despite its contributions, the study is subject to limitations, including the exclusive reliance on the Dimensions database, a search strategy that may have omitted relevant studies using alternative terminologies, and the inherently quantitative nature of bibliometric analysis which cannot capture qualitative nuances. Future research should adopt mixed-methods approaches combining bibliometric mapping with qualitative systematic reviews, and incorporate multiple databases such as Scopus and Web of Science. For curriculum developers and policymakers—including the Indonesian Ministry of Education—the findings offer actionable insights: character education should prioritize project-based, experiential, and socially engaged learning over prescriptive moral instruction; integrate digital citizenship education as a core component to address online disinformation, cyberbullying, and ethical dilemmas of the digital age; and ground character formation in local cultural epistemologies such as *gotong royong* (mutual cooperation), *musyawarah* (deliberative consensus), and *keadilan sosial* (social justice) as lived ethical practices rather than abstract ideological principles. By embracing a culturally responsive, technologically informed, and critically reflexive pedagogy, educators and policymakers can cultivate learning environments that foster not only academic excellence but also the moral and social capabilities necessary for building just, compassionate, and sustainable societies.

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