



Design and management of an inclusive physical activity curriculum for children: systematic literature review

Diseño y gestión de un currículo inclusivo de actividad física para niños: revisión sistemática de la literatura

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Abstract

Introduction: Inclusive physical activity for children has become a major educational concern because it is closely linked to access, equitable participation, and the development of children with and without disabilities. A more comprehensive review is needed to guide the design and management of inclusive physical activity curricula in schools.

Methodology: This study used a systematic literature review following the PRISMA guidelines, with Scopus as the primary database. Articles published up to 6 April 2026 were screened for relevance, title accuracy, abstract and keyword suitability, data completeness, peer-reviewed status, English language, and open-access availability. Of the 1,082 records initially identified, 97 met the inclusion criteria and were analyzed in depth.

Results: The findings produced two main novel contributions. The first is a managerial framework for an inclusive physical activity curriculum for children, covering admission, identification, assessment, child profiles, instructional planning, learning assessment and evaluation, learning outcomes reports, and transition periods. The second is a classroom-level implementation framework that includes learning objectives, methods, materials, media, instructional procedures, evaluation, feedback, and follow-up adapted to children's characteristics.

Conclusions: This study shows that the design and management of an inclusive physical activity curriculum remain highly relevant and make important theoretical and practical contributions to policy, school governance, and adaptive, sustainable inclusive teaching.

Keywords

Design, management, inclusive, physical activity, children.

Resumen

Introducción: La actividad física inclusiva para niños se ha convertido en una preocupación educativa importante porque está estrechamente vinculada con el acceso, la participación equitativa y el desarrollo de niños con y sin discapacidad. Se necesita una revisión más completa para orientar el diseño y la gestión de currículos inclusivos de actividad física en las escuelas.

Metodología: Este estudio utilizó una revisión sistemática de la literatura siguiendo las directrices PRISMA, con Scopus como base de datos principal. Los artículos publicados hasta el 6 de abril de 2026 fueron examinados según su relevancia, precisión del título, adecuación del resumen y las palabras clave, integridad de los datos, condición de revisión por pares, idioma inglés y disponibilidad en acceso abierto. De los 1.082 registros identificados inicialmente, 97 cumplieron los criterios de inclusión y fueron analizados en profundidad.

Resultados: Los hallazgos produjeron dos contribuciones novedosas principales. La primera es un marco de gestión para un currículo inclusivo de actividad física para niños, que abarca admisión, identificación, evaluación, perfiles infantiles, planificación de la enseñanza, evaluación y valoración del aprendizaje, informes de resultados de aprendizaje y períodos de transición. La segunda es un marco de implementación a nivel de aula que incluye objetivos de aprendizaje, métodos, materiales, medios, procedimientos de enseñanza, evaluación, retroalimentación y seguimiento adaptados a las características de los niños.

Conclusiones: Este estudio muestra que el diseño y la gestión de un currículo inclusivo de actividad física siguen siendo altamente relevantes y realizan importantes contribuciones teóricas y prácticas a las políticas, la gobernanza escolar y la enseñanza inclusiva adaptativa y sostenible.

Palabras clave

Diseño, gestión, inclusión, actividad física, infancia.

Introduction

The persistently high proportion of children with and without disabilities who remain physically inactive during school-based learning is a critical concern, as it contributes to rising obesity and a range of related health problems. Engelen et al., (2021) inclusive physical activity programs are needed not only to expand access and ensure equitable participation, but also to enable every child to engage safely, meaningfully, and sustainably in movement-based learning experiences. Properly implemented inclusive physical activity is believed to enhance physical fitness, motor competence, overall health, and social and psychological development among children with disabilities (Butterworth et al., 2024; Cascone et al., 2020; Pushkarenko et al., 2022). An adaptive and responsive design of physical activity programs is considered important in addressing the diverse needs of learners and in creating more participatory and barrier-free learning environments (Goodyear et al., 2023; McCracken et al., 2023). With adequate support from teachers, schools, and policy frameworks, inclusive physical activity has strong potential to serve as a key strategy for preventing long-term health problems while strengthening the quality of equitable education.

Physical activity learning has been shown to contribute positively to multiple dimensions of child development, encompassing not only the physical domain but also cognitive functioning and socio-emotional growth. Inclusive physical activity learning does not simply place all learners in the same educational setting, but also requires the adaptation of objectives, methods, rules, media, and support strategies to the needs, abilities, and characteristics of each child (Domenico et al., 2022; García & González, 2020). Inclusive physical activity plays an important role in creating learning environments that value diversity and foster empathy, cooperation, and mutual acceptance among learners (Dixon et al., 2022; Goodwin et al., 2022; May et al., 2021). Trengthening inclusive physical activity learning in schools is a vital strategy for supporting children's holistic development while advancing an equitable, participatory, and sustainable education.

Various structural barriers continue to constrain the participation of children with disabilities in school-based physical activity learning, including limited accessibility, restricted opportunities to join appropriate programs, and inadequate support services. Tristani et al., (2021) and Utvić et al., (2025) argue that participation in physical activity learning should not be viewed merely as an individual issue, but as one closely shaped by the design of learning environments, curricula, and support systems. In this context, the design and management of an inclusive physical activity curriculum for children is of central importance. Sansi et al., (2021) an inclusive curriculum can create barrier-free environments, widen equitable access, and ensure that every child has the opportunity to engage in physical activity safely, meaningfully, and sustainably. Kenny et al., (2023) and Ulset et al., (2025) further emphasize the need for interventions that extend beyond the child as an individual and incorporate strategies at the community and policy levels, particularly within schools and childcare services. The development of an inclusive physical activity curriculum should be positioned within a systemic effort that integrates program design, institutional support, and educational policy to enhance the effective and equitable participation of children with disabilities.

Previous systematic reviews have identified a range of strategies for implementing inclusive physical activity for children. However, these findings still require refinement in several areas, including stronger theoretical grounding, methodological validation, cross-context verification, and ongoing evaluation to support broader generalisability. For example, Wang & Qiu (2025) noted that research on inclusive physical activity for children has not yet been fully supported by cross-context verification and high-quality evaluation capable of enabling wider generalization. The development of an inclusive physical activity curriculum for children, therefore, requires a more focused synthesis of evidence, particularly to assess practices that are effective, adaptive, and applicable across diverse educational contexts. A systematic literature review is essential for consolidating fragmented evidence, identifying best practices, and establishing conceptual as well as practical foundations for interventions that are more efficient, effective, and sustainable (Aldridge & McLure, 2024; Barrenechea et al., 2023; Chong et al., 2022). The present review serves not only to map the development of research in this field, but also to provide clearer direction for the design of an inclusive physical activity curriculum that can be implemented more broadly across school and child-service settings.



Conducting a systematic literature review on the design and management of an inclusive physical activity curriculum for children is highly important, as previous studies in this field continue to reveal substantial gaps in the conceptual, methodological, and practical dimensions. Silva et al., (2023) a systematic literature review is needed not only to clarify current knowledge development, but also to strengthen the conceptual and empirical foundations for improving the quality of learning in schools. Systematic synthesis of recent evidence provides a more comprehensive understanding of curriculum design elements, management strategies, support mechanisms, and effective instructional approaches for children with and without disabilities (Iacono et al., 2023; Strnadová et al., 2024). This study specifically focuses on the inclusion of individuals with disabilities within physical activity curriculum design and management. The findings of a systematic literature review can also offer practical guidance for educators, policymakers, and researchers in designing learning programs that are effective, efficient, and sustainable (Matos et al., 2023; Tinoca et al., 2022). Ultimately, the expected impact of this research is to ensure that every child, with or without disabilities, has an equal opportunity to develop physically, socially, emotionally, and academically.

Method

This study employed a systematic literature review (SLR) to comprehensively examine an inclusive physical activity curriculum for children comprehensively. A systematic literature review is a research method used to identify, evaluate, and synthesize findings from relevant studies on a particular topic (Chigbu et al., 2023; Mengist et al., 2020). The SLR approach was selected because it offers a systematic, structured, and replicable framework for identifying, assessing, and synthesizing relevant scientific evidence. In conducting the review, this study followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure transparency, accountability, and rigor at every stage, from the literature search and document screening to eligibility assessment and final article inclusion. PRISMA is a reporting guideline designed to help researchers present systematic reviews and meta-analyses in a clear, complete, and transparent manner (Sarkis-Onofre et al., 2021). By adopting these guidelines, the literature synthesis process became more focused and methodologically robust, while reducing the potential for bias in study selection.

The data sources in this study were limited to scientific articles published in Scopus-indexed journals to ensure the quality, relevance, and academic credibility of the literature reviewed. In a systematic literature review, data sources consist of scholarly publications that are relevant to the research topic and retrieved from reliable academic databases (Gusenbauer & Haddaway, 2020; Heck et al., 2024). The inclusion criteria comprised five main requirements: (1) the article was published on or before 6 April 2026; (2) the title, abstract, and keywords explicitly indicated relevance to the design and management of an inclusive physical activity curriculum for children; (3) the article appeared in a peer-reviewed journal; (4) the manuscript was written in English to ensure accuracy and consistency in data extraction and analysis; and (5) the article was available as open access. These criteria ensured a recent, relevant, and accessible body of literature, enabling a deeper analysis of inclusive physical activity curricula for children.

Operational Definition

The concept of designing and managing an inclusive physical activity curriculum for children provides a fundamental basis for developing physical activity learning that is fair and accessible to all children within an educational institution. An inclusive physical activity curriculum is a deliberately designed program that ensures all children, including those with disabilities, can participate in physical activity safely, meaningfully, and equitably (Visser et al., 2026). Inclusive physical activity also emphasizes the involvement of children with and without disabilities in sport, recreation, and other forms of movement, without unequal access to opportunity (Alhumaid et al., 2021; Gentile et al., 2023). This concept, therefore, affirms that every child has an equal right to inclusive, participatory physical activity learning that supports holistic development.

From a design perspective, an inclusive physical activity curriculum must be developed systematically to address the diverse learning needs of children. Curriculum development involves improving content, format, methods, and learning resources to strengthen both the theoretical and practical foundations of



inclusive education (Bertills & Björk, 2024; Demchenko et al., 2021). Inclusion, integrated support, a shared vision, qualified educators, and high-quality inclusive practices are essential foundations for successful implementation within educational settings (Lundqvist, 2023). The design of an inclusive physical activity curriculum must be comprehensive to provide responsive, high-quality learning experiences that meet the needs of all children.

From a management perspective, the success of an inclusive physical activity curriculum depends greatly on how consistently the program is planned, implemented, and evaluated. The design and management of such a curriculum refer to the development, planning, implementation, and evaluation of physical activity programs that are accessible to all children, with and without disabilities (Carbone et al., 2021). Improving learning quality through the mastery of fundamental movement skills among learners with and without disabilities is a central aim of curriculum management in inclusive physical activity (Pushkarenko et al., 2022; Utvić et al., 2025). Inclusive physical activity programs managed collaboratively have been shown to enhance social interaction among learners and to generate positive effects on children's psychosocial development (Sansi et al., 2021). The management of an inclusive physical activity curriculum must be systematic and sustained to support the academic, social, and psychological development of all learners to the fullest extent.

Table 1. Defining Elements of design and management of an inclusive physical activity curriculum for children

No	Defining	Reference
1	An inclusive physical activity curriculum for children is a planned physical activity program designed to ensure that all children, including those with disabilities, can participate safely, meaningfully, and equally.	(Visser et al., 2026)
2	Designing an inclusive physical education curriculum aims to provide opportunities for children with disabilities to participate in community life.	(Bertills & Björk, 2024)
3	Inclusive physical activity aims to ensure that all children with and without disabilities can participate in sports, recreation, and physical activity.	(Gentile et al., 2023)
4	Developing a physical activity curriculum involves how a preschool implements inclusive education through full inclusion, integrated support, a shared vision, qualified staff, and high-quality inclusive practices.	(Lundqvist, 2023)
5	The management of an inclusive physical activity curriculum aims to improve learning by focusing on fundamental movement skills for students with and without disabilities.	(Pushkarenko et al., 2022)
6	An inclusive physical activity program was found to have a positive impact on the psychosocial development of children with and without intellectual disabilities.	(Yang et al., 2022)
7	Developing a physical activity curriculum involves improving the content, formats, methods, and resources for mastering the theoretical and practical foundations of inclusive education.	(Demchenko et al., 2021)
8	Design and management of an inclusive physical activity curriculum involves the development, planning, implementation, and evaluation of physical activity programs accessible to all children, including those with and without disabilities.	(Carbone et al., 2021)
9	Inclusive physical education is defined as the inclusion of students with disabilities in general physical education classes, with necessary services and support provided.	(Alhumaid et al., 2021)
10	An inclusive physical activity program used a collaborative learning approach to increase student contact and social interaction.	(Sansi et al., 2021)
11	An inclusive physical activity curriculum for children is a program designed as a simple and practical tool that has demonstrated substantial benefits for children with and without disabilities.	(Tristani et al., 2021)
12	Management of inclusive physical activity involves planning and implementing structured programs that combine adapted instruction and individualized support to promote effective inclusive physical education for all children.	(Koh, 2020)

Information Sources

The data sources for this study were obtained through a systematic, structured search of Scopus, the primary database. The initial stage involved a comprehensive literature search, with keywords carefully identified and selected to align with the review's focus. The selection of appropriate keywords was crucial to ensure that the retrieved articles were not only broad in scope but also relevant to the research topic. A systematic literature search strategy should be reported transparently and in sufficient detail so that the identification process can be replicated and its validity assessed by other researchers (Harari et al., 2020; Shaheen et al., 2023). Through this strategy, the data collection process captured a representative range of scientific publications, thereby strengthening the quality and depth of the subsequent analysis.

This study adopted a macro-level methodological approach, using a top-down framework, to trace developments in the field of the design and management of an inclusive physical activity curriculum for

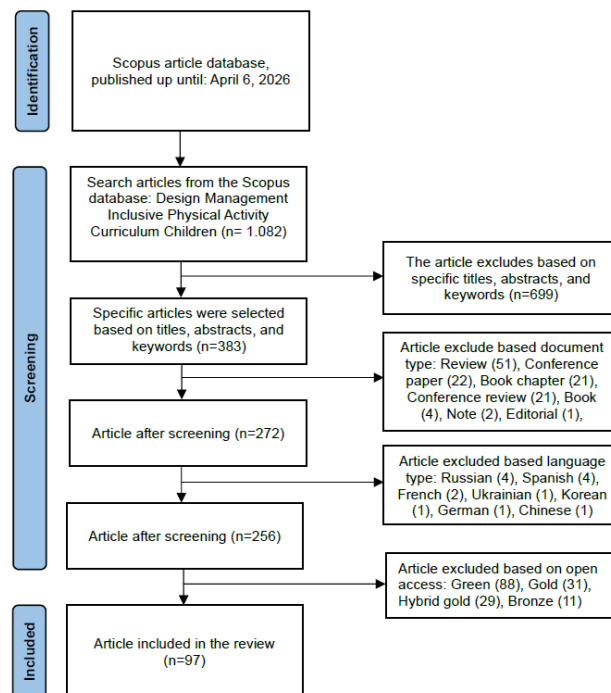


children. A top-down approach is used to understand a field of inquiry from a general overview to more specific elements, thereby enabling researchers to identify patterns, structures, and directions of scholarly development more systematically (Ding, 2023; Eicken et al., 2021). This approach enabled the researchers to comprehensively map the research landscape, including major themes, the contributions of key authors, and emerging methodological trends. By examining the evolution of the topic and its changing research directions over time, this stage provided a strong conceptual foundation for further analysis (Hulland, 2020). These steps were undertaken to ensure that the study would not only offer a deeper account of the field's current state but also provide a clearer perspective on its future dynamics and development opportunities.

Study Organization

Following the identification and retrieval of literature from the Scopus database, the next stage involved screening articles against the predefined inclusion criteria. In a systematic literature review, article screening is designed to ensure that only studies with high relevance to the research topic are analyzed further, while also helping to identify knowledge gaps within the field (Foo et al., 2021). This study emphasized the importance of a broad, in-depth review while prioritizing the quality of sources drawn from relevant disciplines. Article selection and exclusion were conducted systematically in accordance with the PRISMA guidelines through the review of titles, abstracts, and keywords, so that the focus remained on the most relevant literature (Mohamed et al., 2020; Trifu et al., 2022). In addition, this stage served a broader analytical purpose by supporting a more comprehensive review of the literature. The full sequence of systematic literature review stages based on the PRISMA guidelines is presented in detail in Figure 1.

Figure 1. Systematic literature review using PRISMA



Based on a literature search conducted in the Scopus database up to 6 April 2026, using the keyword combination “design and management of an inclusive physical activity curriculum for children” across multiple disciplines, a total of 1,082 documents were identified, spanning the publication period from 1995 to 2026. The initial screening process excluded 699 documents because their titles, abstracts, or keywords did not align with the research focus, leaving 383 for the next stage of selection. At the eligibility stage, further screening was carried out by applying exclusion criteria based on publication type, namely review articles (51), conference papers (22), book chapters (21), conference reviews (21),

books (4), notes (2), and editorials (1), resulting in 272 documents. Screening also considered language, excluding articles published in Russian (4), Spanish (4), French (2), Ukrainian (1), Korean (1), German (1), and Chinese (1), which reduced the total to 256 documents. The final selection stage applied the open-access criterion by excluding documents classified as green (88), gold (31), hybrid gold (29), and bronze (11), resulting in 97 articles that met the criteria and were deemed eligible for full systematic review.

Data Extraction

Data extraction in this study was conducted using a standardized form designed to capture essential information from each article that met the inclusion criteria. In a systematic literature review, data extraction is typically performed systematically by two or more independent reviewers to ensure objectivity, consistency, and reproducibility of the findings (Harari et al., 2020; Silva et al., 2023). The reviewers involved in this process were Prof. Dr. Sujarwo and Dr. Wiwik Wijayanti, both academics from Universitas Negeri Yogyakarta, who conducted in-depth evaluations of the articles that had passed the full-text eligibility assessment. Each study was carefully examined by identifying and recording key data according to predefined components, thereby enabling an accurate, structured, and research-relevant data synthesis.

The extracted information covered three complementary dimensions. The first concerned the year of publication and the country in which the study was conducted. These data were used to examine the temporal distribution and geographical spread of the research evidence. The second focused on the methodological characteristics of the studies, including research design, setting, and implementation context. The third addressed participant profiles, study duration, and the type and substance of the intervention or program applied, including the measurement instruments and outcome indicators observed. In this systematic literature review, the synthesis of the main findings was directed towards identifying patterns, comparing results across studies, and drawing comprehensive conclusions from the accumulated evidence (Chong et al., 2022; Heck et al., 2024; Trifu et al., 2022). The analysis covered key components such as the identification and assessment of children with special needs, the planning, implementation, and assessment of learning, as well as program evaluation, and the preparation of learning outcomes reports (Spanakis et al., 2023). This approach enabled a more integrated, systematic understanding of best practices for developing an inclusive, evidence-based curriculum.

A total of 97 documents that met the inclusion criteria were subsequently analyzed in an integrated manner using a PRISMA-based systematic literature review, complemented by bibliometric analysis. This approach enabled both interpretive synthesis and a quantitative overview of the research field's structure and development. The analysis was conducted to address three main research questions: Is the exploration of the design and management of an inclusive physical activity curriculum for children still a relevant topic for future scientific research? (RQ1); How is the distribution of research related to the design and management of an inclusive physical activity curriculum for children? (RQ2); dan What are the theoretical and practical implications of future research perspectives on the design and management of an inclusive physical activity curriculum for children? (RQ3). This review is expected to provide a comprehensive understanding of the dynamics shaping the development of the field. The findings also serve to identify dominant research trends. In addition, the review helps reveal persisting research gaps, which may inform future research agendas and support the development of more effective and inclusive curriculum designs.

Results

The findings of this study were based on 97 articles that passed the final selection stage following PRISMA screening of Scopus-indexed documents on the design and management of an inclusive physical activity curriculum for children. These articles were analyzed to map the field's publication profile more comprehensively. The analysis covered the number of publications, publication trends over time, and the journals most frequently used as outlets for scholarly work. The review also examined the intellectual and institutional structures that have shaped the field's development. This was carried out by identifying the most productive authors, leading institutions, and countries that made substantial contributions to knowledge development. The descriptive and relational findings not only revealed patterns of

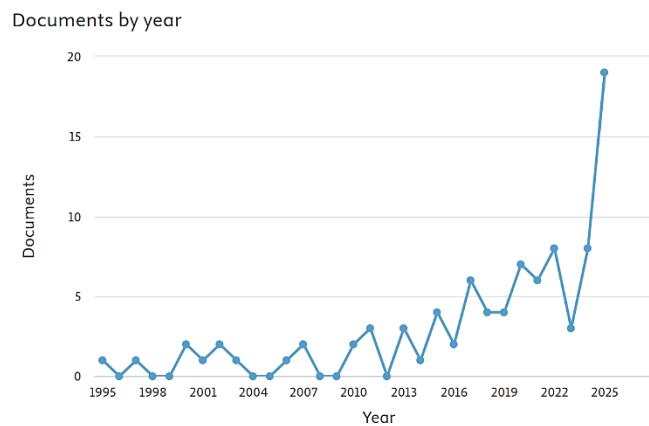


literature growth, but also highlighted the key actors influencing its direction. This overview helps explain where scientific activity is concentrated and illustrates the role of the academic community in advancing understanding of inclusive physical activity curricula for children.

RQ1: Is the exploration of the design and management of an inclusive physical activity curriculum for children still a relevant topic for future scientific research?

Based on a Scopus database search, research on the design and management of an inclusive physical activity curriculum for children remains an emerging field, with 97 articles identified from 1995 to 2026. This pattern indicates that the field has not yet reached saturation, despite publication trends showing increasingly strong growth over the past decade, particularly since 2017. As shown in Figure 2, the number of publications rose to 6 in 2017, increased again in 2020 and 2022, and reached a peak in 2025 with 19 articles, suggesting that this topic is becoming increasingly relevant within the contemporary research agenda. These findings are consistent with the aim of the review, which emphasizes mapping research trends, the field's developmental structure, and opportunities for future inquiry. Recent studies have generally focused on inclusive curriculum design, adaptive teaching strategies, educator competence, and program evaluation that supports more equitable child participation. This review also shows that an inclusive physical activity curriculum contributes to improving the quality of participation and learning experiences, and to the development of educational programs that are more responsive to the diverse needs of children.

Figure 2. Number of psychological interventions for sports injury recovery publications



Source: Scopus Database

Since 1995, publications on the design and management of an inclusive physical activity curriculum for children have remained limited and largely sporadic, as reflected in the annual output of only 0–2 articles during the early phase. This pattern began to strengthen after 2010 and became more pronounced during the 2017 to 2025 period, with publication activity peaking in 2025. These trends indicate that the topic is receiving increasing attention in scholarly discourse and remains highly relevant for future research. This finding is consistent with the research database, which shows that 97 articles met the final selection criteria in the Scopus search conducted up to 6 April 2026. The field may therefore be understood as a growing area of inquiry that has not yet reached saturation and still offers substantial scope for both conceptual and empirical advancement.

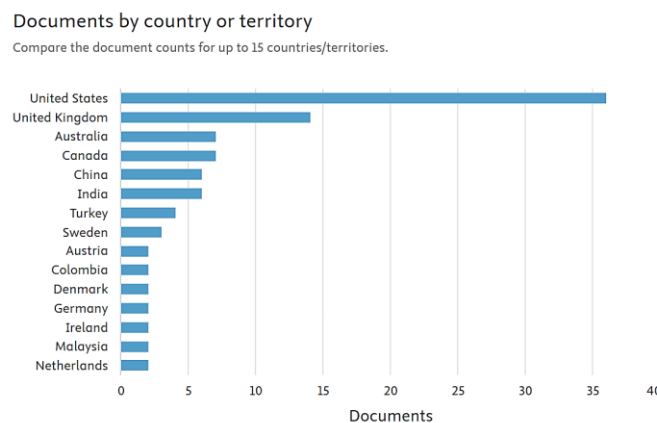
This study is important for deepening the understanding of an inclusive physical activity curriculum for children, particularly by formulating curriculum design principles responsive to diverse needs, developmental characteristics, and children's participation in inclusive learning contexts. It can also strengthen the theoretical and practical foundations for developing curriculum management strategies that are more adaptive, effective, and sustainable in schools and child education programs. In addition, this research may promote a deeper understanding of how an inclusive physical activity curriculum for children can be implemented in practical and sustainable ways across the planning, delivery, evaluation,

and reporting of physical activity learning. The findings are expected not only to address existing research gaps but also to provide an evidence-based foundation for researchers, teachers, and program managers in designing more effective policies and practices for inclusive education.

RQ2: How is the distribution of research related to the design and management of an inclusive physical activity curriculum for children?

The analysis of 97 articles shows that research on the design and management of an inclusive physical activity curriculum for children is unevenly distributed across countries. Based on the number of articles from the top 15 countries or territories, the United States was the leading contributor with 36 documents, followed by the United Kingdom with 14. Australia and Canada each contributed 7 documents, while China and India each produced 6. Further contributions came from Turkey (4 documents) and Sweden (3), while Austria, Colombia, Denmark, Germany, Ireland, Malaysia, and the Netherlands each contributed 2 documents (see Figure 3). This pattern indicates that the field's development is still dominated by a limited number of countries, particularly those in the English-speaking world. The imbalance is unlikely to be driven by the exclusion of non-English publications, as only a small number of studies were excluded on this basis, namely Russian (4), Spanish (4), French (2), Ukrainian (1), Korean (1), German (1), and Chinese (1). These findings are important for expanding international collaboration, enriching research contexts, and supporting the development of more adaptive and sustainable inclusive physical activity curricula.

Figure 3. Number of articles by the top 15 countries or territories



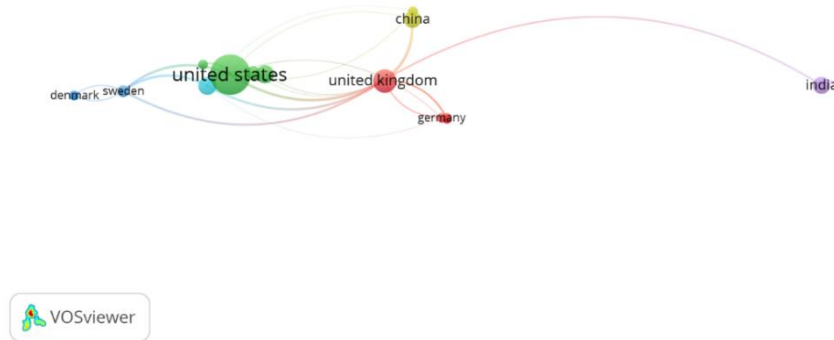
Source: Scopus Database

The pattern shown in the figure suggests that the development of this field is largely supported by established research ecosystems, inclusive education policies, funding capacity, and stronger traditions of international publication across several countries. By contrast, the lower contribution from other countries does not necessarily indicate that the issue is less urgent. It may instead reflect limited access to reputable publication outlets, differences in policy priorities, and the uneven development of interdisciplinary research in adaptive and inclusive physical education. Within the context of this research database, this distribution confirms that although 97 articles met the inclusion criteria, the field's geographical representation remains unbalanced. As a result, existing findings are still largely shaped by particular social, educational, and institutional contexts, and may differ from perspectives found in non-English literature, such as Spanish-language studies, which may reflect distinct cultural and educational approaches to inclusion. This condition presents an important opportunity for further research across a wider range of countries, enabling the development of inclusive physical activity curricula for children that are more contextually grounded, comparative, and globally relevant.

This study also analyzed the relationships among countries involved in research on the design and management of an inclusive physical activity curriculum for children using VOSviewer software. By mapping patterns of international collaboration, this analysis provided a clearer understanding of the geographical distribution of scholarly contributions and the extent of cross-national research engagement in the

field. This stage was important for formulating a systematic prospective research agenda. The VOSviewer analysis revealed interconnections among countries in studies on an inclusive physical activity curriculum for children (see Figure 4).

Figure 4. Network country visualization

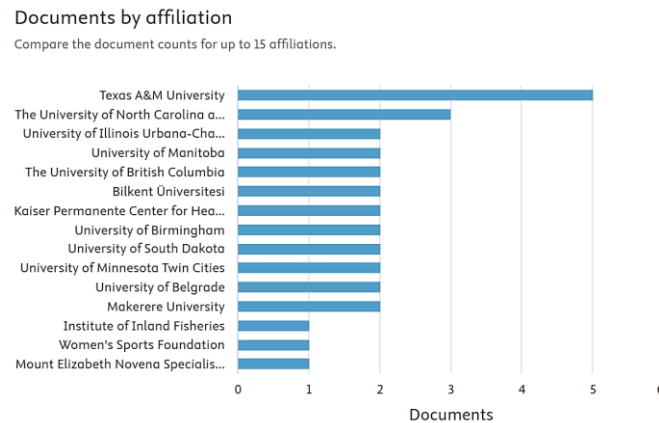


Source: Output Vosviewers Software

These findings further reinforce that the principles underlying the design and management of an inclusive physical activity curriculum for children have attracted attention across continents, including the Americas, Europe, Asia, and Australia. This pattern suggests that the field has gained international recognition as an important area of educational and health-related inquiry. It also indicates a growing awareness that inclusive physical activity curricula can serve as a strategic means of promoting equitable participation and holistic child development across diverse learning contexts. Based on a review of articles by country or territory, the concept of a physical activity curriculum for children remains relatively underrepresented in African countries. Yet this concept is highly relevant across diverse national contexts and may help integrate these principles into more inclusive frameworks of physical activity, educational curricula, and children's learning.

The distribution of scholarly publications on the design and management of an inclusive physical activity curriculum for children across the top 15 institutional affiliations indicates that research contributions are dispersed across a range of universities and organizations, although productivity remains relatively uneven. As illustrated in the figure, Texas A&M University ranks first with five documents, followed by The University of North Carolina at Chapel Hill with three documents. Several other institutions, namely the University of Illinois Urbana-Champaign, the University of Manitoba, the University of British Columbia, Bilkent University, Kaiser Permanente Center for Health Research, the University of Birmingham, the University of South Dakota, the University of Minnesota Twin Cities, the University of Belgrade, and Makerere University, each contributed two documents. In contrast, the Institute of Inland Fisheries, the Women's Sports Foundation, and Mount Elizabeth Novena Specialist Center each contributed one document. This pattern suggests that the development of this field of study is not concentrated within a single institution; rather, it is driven by a diverse network of academic and professional affiliations (see Figure 5).

Figure 5. Number of articles by the top 10 affiliations



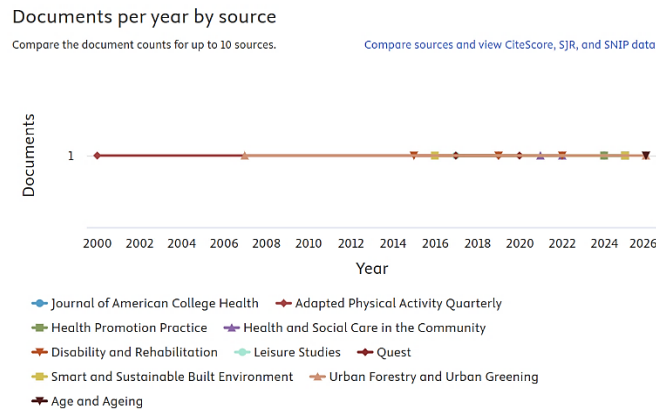
Source: Scopus Database

Based on the figure above, Texas A&M University ranks highest, but its lead over other institutions is not substantial. This suggests that the development of this field is supported by contributions that are relatively dispersed across universities and research institutions. The pattern indicates that the field is still in a growth phase, with emerging research centers that have not yet been fully consolidated into large institutional networks. The presence of institutions from North America, Europe, Asia, and Africa also shows that the issue of an inclusive physical activity curriculum for children has attracted cross-regional attention, although the intensity of contribution still varies. In the context of the 97 articles that passed the final selection, this distribution of affiliations highlights significant opportunities to expand inter-institutional collaboration, strengthen comparative research, and build a more diverse evidence base, thereby making the development of inclusive curricula more scientifically robust and more relevant across educational contexts.

This pattern also implies that the field has not yet been dominated by a single institutional center of knowledge production, which creates a favorable condition for broader scholarly diversification and innovation. A more distributed institutional landscape may encourage the integration of varied educational, cultural, and policy contexts into future research on inclusive physical activity curricula for children. At the same time, it points to the need for stronger international research partnerships that can connect fragmented contributions into more cumulative and comparable bodies of evidence. Such collaboration would be valuable not only for refining conceptual and methodological approaches but also for developing curriculum models that are more transferable across settings while remaining responsive to local needs. Consequently, the current distribution of institutional affiliations should be viewed not as a limitation alone, but as a strategic opportunity to advance the field through more inclusive, interconnected, and globally grounded research efforts.

The distribution of research on the design and management of an inclusive physical activity curriculum for children across journal sources shows that Disability and Rehabilitation is the most productive outlet, with 3 articles. It is followed by Urban Forestry and Urban Greening, Health and Social Care in the Community, Leisure Studies, Smart and Sustainable Built Environment, Health Promotion Practice, Journal of American College Health, and Adapted Physical Activity Quarterly, each of which published 2 articles. Meanwhile, Age and Aging and Quest each contributed 1 article. This pattern indicates that publications in this field are distributed across journals with diverse disciplinary orientations, including rehabilitation, public health, recreation studies, and adapted physical activity (see Figure 6).

Figure 6. Number of Articles by Top 10 Source



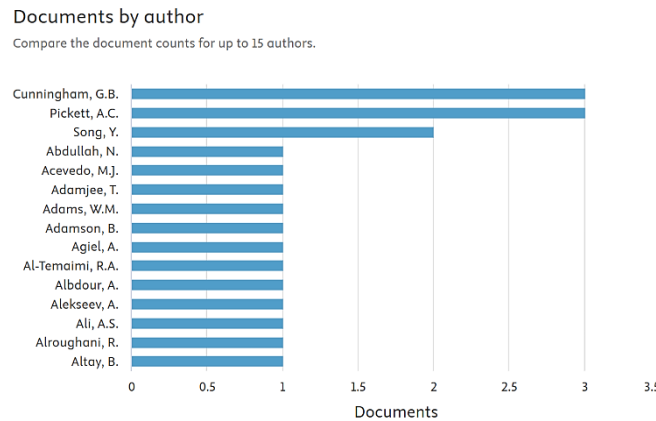
Source: Scopus Database

The figure above shows that publication trends across journal sources are dispersed rather than concentrated in a single dominant outlet over time. Although Disability and Rehabilitation is the most productive source, its contributions appeared separately in 2015, 2019, and 2022. Most other journals published only one article in particular years, such as Adapted Physical Activity Quarterly in 2000, Urban Forestry and Urban Greening in 2007, Smart and Sustainable Built Environment in 2016 and 2025, Quest in 2017, Health and Social Care in the Community in 2021, Journal of American College Health in 2024, and Age and Aging in 2026. This pattern confirms that research on the design and management of an inclusive physical activity curriculum for children has developed across disciplines and circulated through multiple publication forums. As such, no journal has yet emerged as a fully established core outlet for this field.

This dispersed publication pattern suggests that the field remains intellectually open and continues to draw insight from multiple disciplinary traditions rather than being confined to a single scholarly domain. Such diversity may be advantageous, as it enables the integration of perspectives from rehabilitation, public health, education, recreation, and adaptive physical activity into a more comprehensive understanding of inclusive curriculum development. At the same time, the absence of a stable core journal indicates that the field has not yet achieved full disciplinary consolidation, which may limit the visibility, continuity, and cumulative impact of its research. This condition highlights the importance of strengthening thematic coherence and fostering stronger scholarly dialogue across publication venues. Consequently, future research may benefit from more sustained dissemination in journals that can serve as key reference points for the field while preserving its interdisciplinary breadth.

The distribution of authors in research on the design and management of an inclusive physical activity curriculum for children does not reveal a particularly strong concentration, although several scholars appear more productive than others. Based on the figure, G.B. and Pickett, A.C. are the most prolific authors, each contributing 3 documents, followed by Song, Y. with 2 documents. Other authors, including Abdullah, N., Acevedo, M.J., Adamjee, T., Adams, W.M., Adamson, B., Agiel, A., Al-Tamimi, R.A., Albhour, A., Alekseev, A., Ali, A.S., Alroughani, R., and Altay, B., each contributed 1 document. This pattern suggests that scholarly productivity in this field remains distributed across many authors. As a result, the field's development appears to be shaped more by collective contributions than by a single, highly dominant group of researchers (see Figure 7).

Figure 7. Number of Articles by Top 15 Author



Source: Scopus Database

The figure above shows that the authorship structure in the field of the design and management of an inclusive physical activity curriculum for children remains relatively dispersed and has not yet become concentrated among a small group of highly productive core authors. This pattern indicates that the field's development is still supported by contributions from many researchers rather than by the dominance of a single well-established academic network. In the context of this study, such a distribution suggests that the topic remains in a phase of scholarly growth, with substantial opportunities for broader collaboration, stronger citation networks, and the emergence of new key researchers who may shape the field's future direction. It also implies that the knowledge base is still being constructed through diverse scholarly contributions rather than through a highly centralized body of authorship. This condition creates valuable space for new perspectives, interdisciplinary engagement, and wider international participation in advancing the field.

RQ3: What are the theoretical and practical implications of future research perspectives on the design and management of an inclusive physical activity curriculum for children?

This study examined 97 manuscripts retrieved from the Scopus database. VOSviewer was used to demonstrate that the findings carry both theoretical and practical implications for future research on the design and management of an inclusive physical activity curriculum for children. The metadata analysis generated by VOSviewer can help researchers and practitioners develop a deeper understanding of the assumptions and findings regarding an inclusive physical activity curriculum for children. In addition, the bibliometric analysis can reveal which variables have been extensively studied and which remain underexplored, thereby providing a useful foundation for future research. From a practical perspective, the VOSviewer-based literature analysis can support the sustainable implementation of inclusive physical activity in children's learning within educational institutions and help promote the wider adoption of such interventions across global contexts.

Based on Figure 8, the most frequently occurring term is physical activity (27), followed by exercise (18), organization and management (15), risk factors (14), and procedures and disabled persons (10 each). Several other terms also appear prominently, including child (9), sports (8), health promotion (7), disability (7), health behavior (6), social support (6), inclusion (6), mental health (5), schools (5), physical education (5), education (5), and wellbeing (5). The prominence of these terms indicates that previous research has largely focused on physical activity, sport, health promotion, disability, and inclusion within the context of children's education. This pattern also suggests that the field has developed around broad thematic concerns, while more specific curriculum-oriented dimensions may still require further scholarly attention.

physical activity contributes to the improvement of motor skills, social interaction, and children's psychosocial development. Further research is therefore still needed to generate models that are more effective and sustainable in addressing contemporary developmental challenges.

Based on the database analyzed in this study, the growth in publications, the distribution of journal sources, and the increasing involvement of multiple authors indicate that research on the design and management of an inclusive physical activity curriculum for children remains in a developmental phase. Developing an inclusive physical activity curriculum is an evolving process that requires both conceptual and institutional support to respond effectively to learners' diverse needs (Baena-Morales et al., 2023; Chiva-Bartoll & Fernández-Rio, 2022). Inclusive physical activity plays an important role in broadening participation, creating safe and meaningful learning experiences, and supporting more equitable engagement for children with and without disabilities (Barla, 2025; Domenico et al., 2022; Fatudimu et al., 2025). These findings and data suggest that this field is increasingly recognized as an integrative area that connects inclusive education, physical activity, child health, and curriculum management.

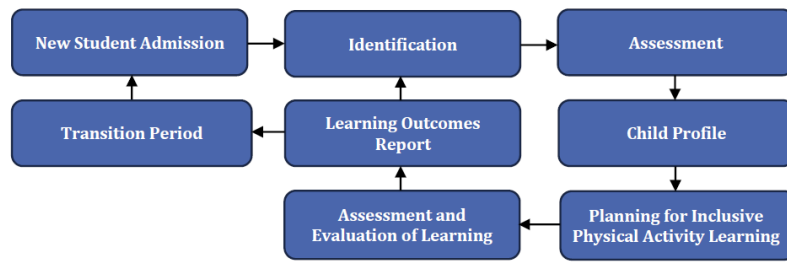
The findings of this study demonstrate that future research should focus not only on affirming the importance of inclusive physical activity, but also on developing a more systematic, operational curriculum model that can be implemented across diverse educational settings. An inclusive physical activity curriculum serves as a comprehensive framework that integrates key managerial processes to provide continuous and responsive support for children with and without disabilities (Kenny et al., 2023). In many countries, inclusive curriculum models have been successfully developed to integrate children with and without disabilities within the same classroom setting. At the classroom level, the framework should be operationalized through adaptive learning objectives, learning methods, learning materials, learning media, instructional procedures, evaluation and assessment, and feedback and follow-up that are aligned with learners' characteristics and developmental needs (Butterworth et al., 2024; Hidayat et al., 2024; Scarinci et al., 2022). In this sense, the design and management of an inclusive physical activity curriculum for children is not merely a theoretical concern but a practical and strategic effort to strengthen school governance, improve teacher readiness, and ensure inclusive education is implemented in a more equitable, meaningful, and sustainable way.

Inclusive physical activity education requires institutional support, educator readiness, and deliberately designed practices so that all children can participate optimally. This is because an inclusive physical activity curriculum cannot be understood merely as a teaching document. In line with Demchenko et al., (2021), Sit et al., (2022) and Hamblin (2022) an inclusive curriculum must be realized through services, support systems, and instructional strategies that enable equitable participation for children with and without disabilities. Its implementation requires careful planning, adequate support, methodological adaptation, and continuous evaluation. The success of inclusive physical activity is strongly shaped by program management, instructional adjustments, and evaluation that are responsive to learners' diverse needs.

A rigorous, in-depth, systematic literature review led to the formulation of an inclusive physical activity curriculum as a comprehensive, continuous managerial pathway. This managerial design includes New Student Admission, Identification, Assessment, Child Profile development, Planning for Physical Activity Learning, Assessment and Evaluation of Learning, Learning Outcomes Reports, and the Transition Period. Developing an inclusive curriculum requires a more comprehensive pathway that includes accessible program planning, implementation, monitoring, and evaluation for all children, including those with and without disabilities, across diverse educational and classroom settings (Engelen et al., 2021; Liu et al., 2025; Sandra et al., 2021). The managerial pathway for an inclusive physical activity curriculum for children developed in this study represents its first major novelty, as it positions the curriculum as an integrated cycle of educational services from school entry to the follow-up of learning development. Tristani et al., (2021), Kenny et al., (2023) and Valiyev et al., (2025) argue that effective inclusive education requires integrated support, a shared vision, high-quality practice, and sustained management, so that learners' needs can be consistently addressed at every stage of service delivery. This study contributes not only to enriching the concept of an inclusive physical activity curriculum but also to providing a more systematic operational framework for ensuring the continuity of services for children with and without special needs.

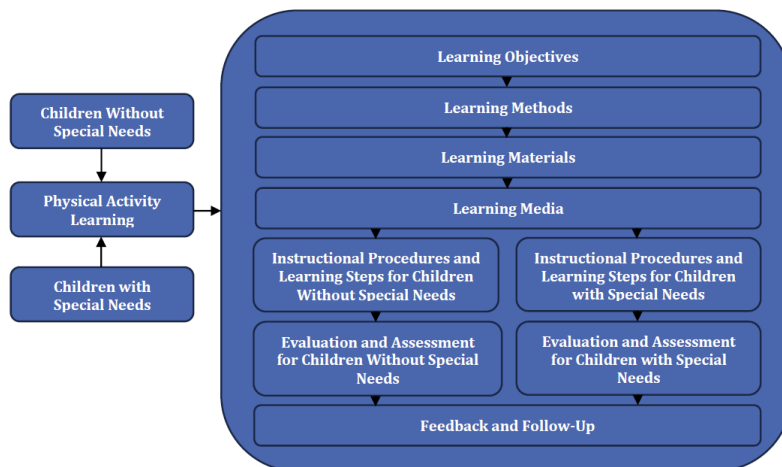


Figure 9. Novelty of the design and management of an inclusive physical activity curriculum for children



The second major finding of this systematic literature review is the managerial pathway of inclusive physical activity at the classroom implementation level. This managerial framework maps inclusive physical activity learning into more specific components, namely Learning Objectives, Learning Methods, Learning Materials, Learning Media, Instructional Procedures and Learning Steps, Evaluation and Assessment, and Feedback and Follow-Up. Inclusive physical activity learning cannot be achieved merely by placing all learners in the same classroom. Inclusive physical activity learning requires the adaptation of objectives, methods, media, and support strategies to children's characteristics and developmental needs (Chávez et al., 2025; Haegele et al., 2021; McCracken et al., 2023). This study further demonstrates a second major novelty: the implementation of inclusive physical activity in the classroom for children successfully connects macro-level curriculum design with micro-level pedagogical practice in classroom instruction (see Figure 10).

Figure 10. Novelty of design and management of an implementation of inclusive physical activity in the classroom for children



The figure above provides a more detailed explanation that the development of an inclusive curriculum must include improvements in content, format, methods, and learning resources so that its implementation is genuinely responsive to the diverse needs of learners. Accordingly, this study does not stop at the general idea of an inclusive curriculum, but extends to an operational account of how learning can be concretely adapted to students' individual profiles. Kenny et al., (2023) and Liu et al., (2025) argue that successful inclusive education requires integrated support, qualified educators, and learning practices that are systematically and sustainably designed. Effective implementation of the stages of inclusive physical activity learning requires differentiated instruction, responsive assessment, and follow-up oriented towards children's development. This position is supported by previous studies showing that inclusive physical activity programs managed adaptively and collaboratively can improve participation, motor skills, social interaction, and psychosocial development among children with and without disabilities (Bertills & Björk, 2024; Gentile et al., 2023; Utvić et al., 2025). These findings confirm that a well-

managed inclusive physical activity curriculum can provide a stronger foundation for equitable and meaningful learning for all children.

The findings of this study indicate that the design and management of an inclusive physical activity curriculum for children has strong practical value for education policy and school governance in the delivery of inclusive physical activity. Rojo-Ramos et al., (2022) argue that the success of inclusive education depends heavily on the school system's readiness to establish planned, integrated, and sustainable support for all learners. The novelty generated by this study has the potential to serve as a reference for schools in developing more systematic mechanisms for early identification, learning planning, learning outcomes evaluation, and service transition. This is consistent with Alhumaid et al., (2021) and Koh, (2020) who state that inclusive curriculum management should encompass the development, planning, implementation, and evaluation of programs accessible to all children, including those with and without disabilities. These findings highlight that the proposed model offers a practical foundation for strengthening inclusive physical activity policy and governance at the school level

The two novelties identified in this study, namely the managerial pathway of an inclusive physical activity curriculum for children and the managerial pathway of inclusive physical activity at the classroom implementation level, indicate that both findings can support the formulation of school policies that are more adaptive, collaborative, and evidence-based. Effective inclusive physical activity practice requires multi-stakeholder collaboration, adequate educator support, and program adjustments that respond to learners' diverse needs (Ding et al., 2020; Engelen et al., 2021; Pushkarenko et al., 2022; Visser et al., 2026). School governance grounded in a clear service pathway will strengthen the continuity of learning and child development. Strong policy and governance support at the school level is necessary because adaptively and sustainably designed inclusive physical activity programs can enhance participation, social interaction, and children's psychosocial development (Lundqvist, 2023; Utomo et al., 2025; Wouters et al., 2020). Overall, these findings confirm that well-structured school governance is essential for sustaining inclusive physical activity as an equitable and development-oriented educational practice.

Although this study has successfully mapped publication trends and proposed two novel managerial models of inclusive physical activity for children in Figures 9 and 10, the findings remain at the conceptual level and are based on a literature review. Mannocci et al., (2020) and Gentile et al., (2023) argue that curriculum development requires further testing to ensure that its design, management, and implementation principles genuinely align with learners' diverse needs. Managerial pathway models in education that remain conceptual and literature-based still need to be tested empirically across different educational levels and national contexts. Inclusive educational practice is strongly influenced by policy variation, school readiness, teacher competence, and the supportiveness of the learning environment. The effectiveness of any inclusive physical activity model is inherently shaped by the educational context in which it is implemented (Demchenko et al., 2021; Martin Ginis et al., 2021; Sansi et al., 2021). Therefore, this research should be continued and developed consistently so that its findings are not only conceptually robust but also empirically validated in educational practice.

Conclusions

The main findings of this study show that the design and management of an inclusive physical activity curriculum for children remains a highly relevant and steadily expanding field of scholarly inquiry. The systematic literature review and bibliometric analysis of 97 selected articles reveal growing academic attention, particularly in recent years, confirming that this topic has not yet reached saturation and still offers substantial scope for both conceptual and empirical development. The review also indicates that previous studies have focused more heavily on physical activity, exercise, organization and management, procedures, and children. In contrast, the more specific integration of inclusivity, the needs of children with disabilities, social support, and the sustainable implementation of an inclusive physical activity curriculum still requires further strengthening. This study, therefore, affirms that the development of an inclusive physical activity curriculum should be understood as a strategic effort to expand participation, ensure equitable access, and support children's holistic development within a just educational context.



The findings of this study also confirm that its principal contribution lies in the formulation of two novelties: the managerial pathway for an inclusive physical activity curriculum for children within the educational service system, and the implementation pathway for inclusive physical activity learning at the classroom level. These two findings demonstrate that an inclusive curriculum cannot remain at the level of concept alone. Still, they must be operationalized through systematic stages, beginning with Identification, Assessment, Child Profile development, learning planning, implementation, evaluation, Learning Outcomes Reports, follow-up, and the Transition Period. At the practical level, the curriculum must also be translated into more applicable components, such as Learning Objectives, Learning Methods, Learning Materials, Learning Media, instructional procedures, assessment, and feedback that are adaptive to learner characteristics. Therefore, the findings of this study offer strong theoretical and practical implications for the development of school policy, strengthening educator capacity, and designing physical activity programs that are more inclusive, adaptive, and sustainable. Future research should empirically test the proposed models across different educational levels and contexts to more firmly establish their validity, effectiveness, and practical relevance.

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