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Innovative teaching resources to promote the holistic development of children in early childhood education

Recursos didácticos innovadores para promover el desarrollo integral en niños y niñas de educación inicial

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ABSTRACT

Early childhood education requires teaching resources capable of addressing the multidimensional nature of child development. Therefore, the objective of this study was to design innovative teaching resources to promote the holistic development of children in early childhood education. To this end, the methodology consisted of a feasibility project based on a literature review, carried out in three phases: bibliographic analysis, feasibility study, and proposal design, based on a content analysis of fifteen indexed academic sources published between 2000 and 2024. The results showed that the teaching resources with the greatest educational potential combine play, children's literature, artistic expression, concrete materials, and information and communication technologies; consequently, a proposal was developed comprising twelve resources organized into four areas of holistic development: cognitive, communicative, socio-emotional, and motor.

Keywords: early childhood education; teaching materials; educational innovation. (Source: UNESCO Thesaurus).

ABSTRACT

Early childhood education requires teaching resources capable of addressing the multidimensional nature of child development. The study therefore aimed to design innovative teaching resources to promote the comprehensive development of children in early childhood education. To this end, the methodology involved a feasible project supported by descriptive documentary research, carried out in three phases: a literature review, a feasibility study, and the design of the proposal, based on a content analysis of fifteen indexed academic sources published between 2000 and 2024. The results showed that the teaching resources with the greatest educational potential combine play, children's literature, artistic expression, concrete materials, and information and communication technologies; consequently, a set of twelve resources organized into four areas of comprehensive development was developed: cognitive, communicative, socio-emotional, and motor.

Descriptors: early childhood education; teaching materials; educational innovation. (Source: UNESCO Thesaurus).

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INTRODUCTION

Early childhood education is the formative stage in which the neurological, cognitive, communicative, socio-emotional, and motor foundations upon which subsequent human development is based are laid; therefore, the quality of the educational experiences that children between the ages of zero and five receive largely determines their subsequent educational trajectories. Within this process, teaching materials serve as the material-symbolic mediator that transforms curricular intent into concrete learning experiences (Manrique-Orozco & Gallego-Henao 2013), as these materials do not serve a merely instrumental function but rather act as a bridge between accumulated cultural knowledge and the child's active construction of meaning.

However, the specialized literature indicates that a significant portion of the resources used in early childhood education classrooms across Latin America continue to follow traditional models that are poorly aligned with the principles of active learning (Area-Moreira 2017); to such an extent that Area-Moreira (2017) describes an incomplete transformation of teaching materials, caught between a print-based model inherited from the Gutenberg culture and the possibilities offered by today's digital environments. In other words, innovation in teaching resources cannot be understood as a simple substitution of a physical medium for a technological one, but rather as a pedagogical reconfiguration that requires criteria of quality, curricular relevance, and a psychoeducational foundation.

In this vein, the actual availability of resources is a primary problem; Aina and Bipath (2022) demonstrated in early childhood care and education centers that the lack of infrastructure and teaching materials directly limits the quality of teaching practices, even when the formal curriculum demands high quality standards. When resources are available, they do not always meet verifiable technical criteria; Aguilar-Juárez et al. (2014) propose a list of criteria for evaluating digital teaching materials, such as curricular relevance, usability, interactive design, and the pedagogical soundness of the content, but according to the authors, these criteria are rarely applied systematically to the selection of resources for early childhood.

Furthermore, the inclusion of information and communication technologies in early childhood education has been a source of controversy: Briceño-Pira et al. (2019) indicate that the use of ICT in preschool is only educational when it is integrated into the curriculum, rather than as an occasional addition disconnected from learning objectives. In this regard, Bethencourt-Aguilar et al. (2021) studied open educational resources aimed at early childhood education and found that their technological, didactic, and socio-communicative characteristics determine their true pedagogical potential, beyond the "free" or accessible nature that is often superficially attributed to them.

However, pedagogical innovation in early childhood education goes beyond the technological aspect; it also includes playful, artistic, and physical resources whose educational effectiveness is already widely recognized. Cano-Valderrama and Quintero-Arrubla (2022) demonstrated how play, as a deliberate pedagogical strategy, fosters the development of logical-mathematical thinking in early childhood; González-Martínez et al. (2022) similarly found that play is a teaching strategy that supports both learning and student inclusion in the classroom. Cango-Patiño and Padilla-Celi (2022) also found that children's literature is an effective resource for developing oral language, especially when in-person interactions are limited, as was the case during the pandemic.

A child's holistic development also includes expressive and motor dimensions that require specific resources. Pinargote-Baque et al. (2022) state that artistic expression plays a very important role in the holistic development of early childhood education because it combines aesthetic sensitivity with cognitive and emotional processes; Aldeán-Riofrío et al. (2023) designed specific teaching resources for body expression in children aged 5 to 6, resulting in observed improvements in coordination and body awareness. Sagñay-Illapa and Soledispa-Chico (2024) developed a graphomotor program aimed at improving fine motor skills—a dimension that directly precedes the learning of writing.

In this vein, concrete materials play a central role in early childhood education because children's

thinking at this stage relies more on the manipulation and sensorimotor interaction with real objects than on abstract representations; Ruesta-Quiroz and Gejaño-Ramos (2022) documented the importance of concrete materials for learning, highlighting their ability to anchor mathematical and logical concepts in tangible experiences. Similarly, Roque-García et al. (2020) analyzed pedagogical and instructional resources designed to meet the communication preferences typical of preschool-aged children, pointing out the need to diversify the sensory channels through which learning is mediated.

As noted, the theoretical foundation for innovation in didactic resources for early childhood education is based on the classic contributions of developmental psychology; Vielma-Vielma and Salas (2000) summarize parallels between the positions of Vygotsky, Piaget, Bandura, and Bruner, noting commonalities regarding the active role of the learner, the social and cultural mediation of knowledge, and the importance of scaffolding provided by both adults and the materials available in the environment. This theoretical convergence thus maintains that every innovative teaching resource must be designed with an explicit theory of children's learning—not merely as a formal or technological novelty.

Building on the aforementioned theoretical foundation, it is worth delving deeper into each author's specific contributions, as summarized by Vielma-Vielma and Salas (2000). Piaget first introduced the idea of a learner who actively constructs their cognitive structures through play with concrete objects—a premise that directly supports the validity of the concrete materials studied by Ruesta-Quiroz and Gejaño-Ramos (2022). Vygotsky then contributes the notion of the zone of proximal development and the social mediation of learning (a principle upon which the educational value of cooperative play described by González-Martínez et al. (2022) is based). Bandura introduces the concept of learning through observation and modeling (a mechanism particularly relevant to the physical and artistic resources studied by Aldeán-Riofrío et al. (2023) and Pinargote-Baque et al. (2022)). Finally, Bruner contributes the notions of instructional scaffolding and the spiral curriculum—ideas that underpin the progressive sequencing of the digital resources evaluated by Aguilar-Juárez et al. (2014).

In line with the above, it is precisely the lack of explicit integration between these four theoretical traditions and the various families of instructional resources that constitutes one of the main weaknesses found in the reviewed literature (in other words, a significant portion of the studies consulted base their proposals on a single theoretical approach without engaging with complementary contributions from others); thus, to be truly innovative, a proposal for teaching resources would have to simultaneously incorporate the four principles mentioned: active manipulation of concrete objects; social mediation of learning; observational modeling; and progressive instructional scaffolding.

In this regard, it is also important to situate the discussion within the specific Ecuadorian educational context, as the country's early childhood education institutions are often constrained by budget limitations when it comes to acquiring commercial teaching materials; therefore, any innovative proposal must, from its very design, include affordable, readily available alternatives without compromising the pedagogical quality of the resource (Aina and Bipath 2022 documented precisely this tension between material constraints and educational quality in early childhood care centers). The proposal presented in this article seeks to balance these two criteria with resources that combine recycled or inexpensive materials with open digital resources (in this latter aspect, we draw on the findings of Bethencourt-Aguilar et al. 2021).

Consequently, the objective of this article was to design innovative teaching resources to promote holistic development in children in early childhood education within the Ecuadorian context.

METHOD

The research aimed to design innovative teaching resources for the holistic development of children in early childhood education; therefore, the methodology was a feasible project based on a descriptive-documentary approach (a feasibility project is one that proposes a solution to a practical problem by designing a viable proposal based on a prior needs assessment). This literature-based approach was aimed at systematizing, describing, and critically analyzing the

existing scientific literature on teaching resources applied to early childhood education, since the study did not intend to collect empirical field data but rather to derive a relevant pedagogical proposal from that analysis.

The study was conducted in three successive stages. In the first stage (bibliographic review), we identified and selected fifteen indexed academic sources published between 2000 and 2024 that directly address the design, evaluation, or application of teaching resources in early childhood or preschool education; inclusion criteria were thematic relevance, indexing in recognized academic databases, and access to the full text; non-academic popular sources and publications without a verifiable peer-review process were not considered.

In the second stage of the feasibility study, a qualitative content analysis was conducted on the selected document corpus; to this end, emerging analytical categories were constructed based on a systematic review of the sources, which were grouped into five families of teaching resources (digital and technological resources, play-based resources, literary and language resources, artistic and physical resources, and concrete material resources). Each source was coded according to the family of resources it belonged to, the area of holistic development it addressed, and the explicit or implicit theoretical foundation underpinning its proposal.

In the third phase, the proposal for innovative teaching resources was designed based on the quality criteria for digital teaching materials proposed by Aguilar-Juárez et al. (2014)—which were also adapted in this study to non-digital resources—based on four evaluation dimensions: curricular relevance, psychopedagogical rationale, feasibility of implementation in the Ecuadorian context, and potential to promote holistic development. Thus, each proposed resource was qualitatively evaluated according to these dimensions before being included in the final proposal. Regarding the ethical considerations of the research, we strictly respected the intellectual authorship of the sources consulted by citing them according to APA, 7th edition, to avoid any form of misappropriation of others' ideas; we also sought a balanced representation of all the families of resources identified in the literature, avoiding bias toward a single pedagogical approach or toward a single type of printed or digital material.

With regard to the units of analysis, each of the fifteen sources was studied using a document form developed specifically for this study, which recorded the objective stated by the original authors, the target population or age range addressed, the type of instructional resource described, the area of child development emphasized; and the reported results or conclusions. This form then allowed for a systematic comparison of the fifteen sources with one another to identify similarities and differences regarding the educational value attributed to each category of resources. Similarly, the documentary triangulation procedure took into account three criteria for comparison: thematic overlap among sources from different geographic origins (since the corpus includes studies from Ecuador, Latin America, Africa, and the Iberian Peninsula); consistency between the stated theoretical foundation and the results reported by each author; and the relevance of the approach (giving greater interpretive weight to recent publications but without excluding classic contributions to developmental psychology, such as those systematized by Vielma-Vielma and Salas (2000)). In this regard, the triangulation did not seek to rank sources by year of publication but rather to identify convergent patterns sustained over time.

Regarding the validity of the literature review, the aim was for all authors of this study to review the data sheets so that the coding of each source according to resource family and area of holistic development would not depend on the individual judgment of a single researcher. If there were discrepancies in the coding, the corresponding source was reread jointly until a consensus was reached (which provided greater internal consistency to the analytical categories used in the results section).As for the methodological limitations inherent in the design used, it should be noted that, because this is a documentary study, it is not possible to establish causal relationships between the use of a specific teaching resource and a child's holistic development, since such relationships were initially described by the authors of each source in different contexts and using different methodologies (they are not directly replicated here). Thus, the results presented below should be understood as a reasoned systematization of prior evidence aimed at designing a proposal, not as original, empirical, or findings regarding effectiveness.

RESULTS

The literature review of the fifteen selected sources allowed us, first, to conduct a general assessment of the current state of teaching resources in early childhood education. This assessment revealed three common findings: on the one hand, the physical availability of resources in early childhood care centers remains uneven (Aina and Bipath 2022, due to limited infrastructure); on the other hand, the technical and pedagogical quality of available resources is not always explicitly evaluated (Aguilar-Juárez et al. 2014); and finally, the incorporation of digital technologies is outpacing the pedagogical reflection that should accompany it (Area-Moreira 2017; Briceño-Pira et al. 2019).

It was also observed that most of the sources reviewed address only one family of resources in isolation without making any explicit reference to the other dimensions of child development (Sagñay-Illapa and Soledispa-Chico (2024) discuss only fine motor skills in relation to a graphomotor program, but make no mention of communicative development, even though such motor skills are a prerequisite for writing (and thus written language); this fragmentation in the literature confirmed the need to develop an integrative proposal that would deliberately link the different families of resources identified in the corpus. Based on this assessment and following the content analysis procedure described in the methodology section, a proposal was developed consisting of twelve innovative teaching resources organized into four areas of holistic development (cognitive, communicative, socio-emotional, and motor). Table 1 presents this proposal, indicating for each resource the area of development it supports and the theoretical foundation on which it is based.

Each of the twelve resources included in Table 1 was also evaluated according to the four dimensions of quality adapted from Aguilar-Juárez et al. (2014): curricular relevance, psychopedagogical foundation, feasibility of implementation in the Ecuadorian context, and potential to promote holistic development; all twelve resources achieved a satisfactory level across all dimensions; however, digital resources additionally require specific teacher training and a minimum level of technological infrastructure—an issue previously criticized by Aina and Bipath (2022) in resource-limited contexts.

Table 1. *Proposal for innovative teaching resources by area of holistic development in Early Childhood Education*.

Area of Development	Proposed teaching resource	Theoretical/documentary basis
Cognitive	Play-based math corners with hands-on materials for counting and sorting	Cano-Valderrama and Quintero-Arrubla (2022); Ruesta-Quiroz and Gejaño-Ramos (2022)
Cognitive	Interactive open educational resources (OER) for guided exploration of basic concepts	Bethencourt-Aguilar et al. (2021); Aguilar-Juárez et al. (2014)
Cognitive	Software and applications evaluated based on usability and curricular relevance	Aguilar-Juárez et al. (2014); Area-Moreira (2017)
Communicative	Children's literature corner with oral storytelling and guided reading	Cango-Patiño and Padilla-Celi (2022)
Communicative	Short audiovisual resources integrated into the daily lesson plan as part of the curriculum	Briceño-Pira et al. (2019)
Communicative	Materials designed to address diverse communicative preferences (visual, tactile, auditory)	Roque-García et al. (2020)
Social-emotional	Structured cooperative games as a strategy for inclusion and collaborative learning	González-Martínez et al. (2022)
Social-emotional	Artistic expression workshops focused on identity and emotional self-regulation	Pinargote-Baque et al. (2022)
Social-emotional	Mediation resources based on adult-child scaffolding in group activities	Vielma-Vielma and Salas (2000)
Motor	Graphomotor program for the development of fine motor skills	Sagñay-Illapa and Soledispa-Chico (2024)
Motor	Body Expression Resources for Children Aged Five to Six	Aldeán-Riofrío et al. (2023)
Motor	Circuit training with concrete materials for gross motor coordination	Ruesta-Quiroz and Gejaño-Ramos (2022)

Note: developed in-house.

In the cognitive domain, the proposal combines concrete materials for counting and sorting with digital resources evaluated according to explicit technical criteria (pending Aguilar-Juárez et al. 2014; Bethencourt-Aguilar et al. 2021 to corroborate this), since both Aguilar-Juárez et al. and Bethencourt-Aguilar et al. agree that the pedagogical quality of a digital resource depends on its interactive design and curricular relevance, not on the technological medium alone. Just as concrete materials anchor logical-mathematical thinking to sensory experiences—as documented by Cano-Valderrama and Quintero-Arrubla (2022)—so too do well-designed digital resources expand that exploration toward more complex symbolic representations.

In the area of communication, children's literature is proposed as a central resource (Cango-Patiño and Padilla-Celi 2022 found it to be effective for the development of oral language even under adverse in-person conditions); but this resource is supplemented by audiovisual materials integrated into the curriculum (Briceño-Pira et al. 2019) and diverse media that cater to different communication preferences (Roque García et al. 2020); therefore, the communication domain is addressed simultaneously through oral, written, audiovisual, and sensory channels.

Regarding the socio-emotional domain, the resources with the strongest empirical support are cooperative play and artistic expression (González-Martínez et al. 2022), where structured play promotes inclusion processes within the classroom; Pinargote-Baque et al. (2022) documented the contribution of artistic expression to the construction of children's identity; in addition to the adult-child scaffolding described by Vielma-Vielma and Salas (2000), based on a synthesis of Vygotsky, Piaget, Bandura, and Bruner, which serves as a cross-cutting mediating resource in all proposed group activities.

Finally, the motor skills area includes body-based and graphomotor resources; the graphomotor program designed by Sagñay-Illapa and Soledispa-Chico (2024) demonstrated concrete improvements in fine motor skills—which directly precede the learning of writing—while the body expression resources described by Aldeán-Riofrío et al. (2023) improve gross motor coordination and body awareness in children aged five to six; thus, the integration of both types of resources—further supported by circuits using concrete materials—covers both fine and gross motor skills within a single pedagogical approach.

It is important to note that the approach does not treat the four areas of holistic development as isolated compartments but rather as dimensions that reinforce one another through a single resource (for example, the children's literature corner based on Cango-Patiño and Padilla-Celi (2022) supports the communicative area—expanding vocabulary and narrative comprehension—and the socio-emotional area—the child's identification with characters and situations described in the stories). Similarly, the artistic expression workshops based on Pinargote-Baque et al. (2022) include fine motor components (manipulating materials) as well as socio-emotional components (expressing internal states through artistic creation).

Regarding the issue of feasibility of implementation, the literature review showed that ten of the twelve proposed resources require no financial investment (they consist of recycled materials, the teacher's voice and body, or open-access digital resources, according to Bethencourt-Aguilar et al. (2021)); only the evaluated software and app resources necessarily involve technological devices and connectivity—which must be considered on a case-by-case basis depending on the infrastructure available at each school—as Aina and Bipath (2022) warn regarding unequal access to resources in early childhood care centers).

Regarding the issue of psycho-pedagogical grounding, the twelve proposed resources were not merely reviewed superficially in the literature; rather, each was individually cross-checked against at least two documentary sources from the analyzed corpus (which prevented the exclusion of resources mentioned in isolation in a single source and lacking convergent theoretical support; for example, the "play-based math corners" resource is supported simultaneously by the findings of Cano-Valderrama and Quintero-Arrubla (2022) on play and logical-mathematical thinking and by Ruesta-Quiroz and Gejaño-Ramos (2022) on the importance of concrete materials, which provides this resource with dual rather than singular documentary support).

Regarding the potential to promote holistic development, the qualitative assessment applied allowed the twelve resources to be ranked according to the number of developmental areas that

each one directly affects (in this regard, resources related to artistic expression and children's literature received a higher rating because they simultaneously affect three of the four areas considered; followed by cooperative games and concrete materials, as they each directly affect two areas). Although exclusively digital resources had high curricular relevance, their greatest impact was in the cognitive area; therefore, it is recommended that they be systematically supplemented with resources from other categories.

It should be noted that the proposal includes, for each of the twelve resources, a suggested sequence for classroom implementation (three pedagogical moments: the child's free exploration of the material; teacher-guided mediation; and group sharing of the experience). This sequence explicitly incorporates the principle of scaffolding described by Vielma-Vielma and Salas (2000), based on Vygotsky, according to which learning is progressively consolidated through the child's autonomous exploration and the intentional support of an adult or a more competent peer.

Furthermore, it is worth noting that for each resource, the proposal includes a guideline for an observable achievement indicator (in terms of behaviors that the teacher can verify during the implementation of the graphomotor program based on Sagñay-Illapa and Soledispa-Chico (2024); the proposed indicator is the child's ability to make controlled strokes within a defined line; in the case of the children's literature corner based on Cango-Patiño and Padilla-Celi (2022), the proposed indicator is the child's ability to orally reconstruct the narrative sequence of a story previously heard). These indicators are not standardized assessment tools but rather qualitative guidelines for daily pedagogical monitoring.

The proposal also takes into account different adaptation criteria based on age range within the Early Childhood Education stage, since the needs of a two-year-old are very different from those of a five-year-old; for example, the physical expression resources described by Aldeán-Riofrío et al. (2023)—originally designed for children aged 5 to 6—require adaptations in terms of motor simplicity for younger groups, while the digital resources evaluated according to the criteria of Aguilar-Juárez et al. (2014) require much stronger adult mediation in younger groups than in older ones.

DISCUSSION

The results allow us to discuss, on the one hand, how innovation and technology relate in early childhood education. Contrary to a reductionist interpretation that equates instructional innovation with the incorporation of technology, the findings from the literature align with Area-Moreira's (2017) warning, as she argues that the digital transformation of instructional materials is incomplete without pedagogical reflection on their educational function. Thus, the proposal put forward in this study subordinates technological criteria to pedagogical criteria, explicitly drawing on the evaluation dimensions proposed by Aguilar-Juárez et al. (2014) for all types of resources (digital or otherwise).

Second, it is worth noting the continued relevance of concrete materials and play as highly educational resources despite the advancement of digital technologies. This persistence is consistent with the theoretical arguments of Vielma-Vielma and Salas (2000), who highlight the active and sensorimotor nature of children's learning in the theories of Piaget and Vygotsky; thus, the concrete materials and structured play described by Cano-Valderrama and Quintero-Arrubla (2022) and González-Martínez et al. (2022) are not obsolete, but rather serve as the experiential foundation upon which digital resources with greater symbolic abstraction can later be built.

Likewise, the inequality in access to educational resources reported by Aina and Bipath (2022) must be addressed, as this directly determines whether an innovation proposal is viable or not. For this reason, the proposal designed in this study focuses on resources whose implementation does not depend solely on expensive technological infrastructure but rather relies on inexpensive concrete materials and open digital resources, as proposed by Bethencourt-Aguilar et al. (2021) regarding the democratizing power of open educational resources for early childhood education.

In addition to the above, the discussion allows us to contrast the results of this study with the warning issued by Briceño-Pira et al. (2019) regarding the curricular integration of ICT in preschool, as the designed proposal deliberately avoids using digital resources as isolated

entertainment activities but instead incorporates them into instructional sequences that combine exploration, teacher guidance, and group interaction, thereby addressing the need for curricular integration highlighted by those authors; Similarly, the inclusion of open educational resources aligns with the recommendations of Bethencourt-Aguilar et al. (2021) regarding the need to consider technological, instructional, and sociocommunicative characteristics before incorporating them into the classroom—not merely their free availability.

Furthermore, the inclusion of artistic and physical expression in the project addresses a broader discussion regarding the disciplinary fragmentation of the Early Childhood Education curriculum (Pinargote-Baque et al., 2022; Aldeán-Riofrío et al., 2023), which demonstrates that these forms of expression are not merely complementary or filler activities but rather privileged pathways for holistic development because they simultaneously integrate motor, emotional, and cognitive components. In other words, the traditional curricular separation between cognitive and expressive areas is not supported by the reviewed literature.

Finally, it is important to mention a limitation of this study, given that it is a literature review: the proposed innovative teaching resources were not subjected to an empirical validation process in actual early childhood education classrooms; therefore, its conclusions should be interpreted as a guiding theoretical synthesis rather than proven, field-tested results. Therefore, it is suggested that future research subject the proposal to validation processes through expert review, followed by pilot studies in specific Ecuadorian educational contexts.

In this regard, it is also worth discussing whether the proposal is relevant within the Ecuadorian regulatory framework, since the country's current early childhood education curriculum includes among its principles respect for play as a guiding activity in child development; this normative principle is directly based on the findings of Cano-Valderrama and Quintero-Arrubla (2022) and González-Martínez et al. (2022), who demonstrate the educational value of play for both cognitive development and educational inclusion. Thus, the designed proposal does not conflict with national curriculum guidelines but rather concretizes them with specific, verifiable resources.

In addition to the above, it is worth noting the role that children's literature plays as a key resource for the transition from oral communication to early literacy; therefore, the finding by Cango-Patiño and Padilla-Celi (2022) regarding the effectiveness of children's literature in developing oral language during the pandemic is relevant in the post-pandemic context in Ecuador because a significant portion of the children who attended early childhood education during that time had documented delays in oral language development—which is why it is necessary to prioritize this resource within the designed proposal.

Finally, it is worth discussing the teacher's formative role in relation to the proposed approach; although instructional resources are material tools for learning, none of them alone can produce comprehensive development without intentional pedagogical intervention by an adult (the principle of scaffolding outlined by Vielma-Vielma and Salas, 2000). Thus, for the proposal to be effectively implemented, a necessary condition—not directly examined in this study—would be ongoing teacher training focused on the pedagogical use of the four categories of resources included in Table 1.

CONCLUSIONS

The literature review enabled us to achieve the objective of designing innovative teaching resources to foster holistic development in children in Ecuadorian early childhood education. The twelve proposed resources (organized by cognitive, communicative, socio-emotional, and motor domains) demonstrate that innovation is not merely technological novelty but rather an explicit psychopedagogical foundation and the deliberate integration of concrete materials, play, children's literature, and artistic expression , body-based activities, and open-access digital resources. Ten of the twelve are feasible without significant financial investment, which addresses the budgetary realities of Ecuadorian institutions without sacrificing pedagogical quality. Furthermore, the sequence of free exploration, teacher mediation, and group socialization functions as a cross-cutting principle and scaffolding; no resource alone produces holistic development without intentional pedagogical intervention. It is recommended to validate this

proposal through expert review and pilot studies in Ecuadorian classrooms. Additionally, continuing teacher training should be strengthened in the use of the four families of resources identified.

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CONFLICT OF INTEREST

The authors declare that they have no conflict of interest with any individuals or institutions related to the conduct of this research.

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