ENCYCLOPEDIA
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Development

Preschool Programs: Effective Curricula

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Introduction

High quality early care and education has been associated with short-term and long-term cognitive, social, and emotional benefits for young children's development. When quality is discussed, it is typically measured by two dimensions: (1) *process* variables (e.g., the nature of children's interactions with adult caregivers) and (2) *structural* variables (e.g., the characteristics that can be regulated by policy and that create beneficial conditions for children's development, including adult:child ratios, group size, and teacher training).[1,2] Curriculum – or the content of what is taught to children – cannot be overlooked; rather, it is a foundational fulcrum on which quality pedagogy rests.

Subject

Despite its centrality to quality, curriculum has been entangled and often confused with allied issues (i.e., beliefs, learning theories/pedagogies, and skills/standards). Yet, curriculum is different from these constructs. For example, most contemporary curricula reflect three guiding principles or beliefs about young children's learning that are manifest in, but distinct from, curriculum: (a) children are competent and eager learners whose natural curiosity yields rich

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learning trajectories; (b) children learn in an integrated way, so that specific subject area learnings (e.g., math, science, language) best take place within the context of child-generated experiences (e.g., cooking, gardening, constructing); and (c) children need exposure to all domains of development – physical and motor, language, cognitive, social and emotional – so that no single domain takes precedence over any other.[3,4]

Curriculum is also different from, but closely linked to, learning theories and pedagogies, which may lead to different curricular strategies. Behaviourist theories of child development often lead to didactic models of direct instruction in which teachers lead learning by presenting discrete facts to large groups of children. Maturationist theories advance pedagogy and curricula that enable children to direct their own learning and learn at their own pace. Constructivist theories espouse pedagogy wherein children are active partners with their socio-cultural environment, including teachers and peers.

Finally, curriculum is different from, but supportive of the enhancement of, children's skills and behaviours. Curriculum is intended to encourage learning processes (e.g., attention, observation), cognitive skills (e.g., reasoning, comparing/contrasting, classification), and the acquisition of specific information (e.g., the names of numbers and letters of the alphabet). In this sense, curriculum is sometimes confused with standards or expectations of what children should know and do.

Curriculum, then, must be clearly understood for what it is and for what it uniquely contributes to early care and education. Curriculum is the content of what is taught and what is learned.

Problems

Several broad issues continue to complicate curriculum design, implementation, and evaluation. First, definitional ambiguity persists regarding the distinctions between curriculum, curriculum frameworks, and pedagogy. Second, the actual desired outcomes from curricula differ, with some privileging content-specific foci and others adopting a holistic orientation. Finally, and in light of the two former issues, it is very difficult to evaluate the effectiveness of curricula given that its effects are integrally related to social and contextual factors, including family background, social class, cultural traditions, and the qualities of the classroom teacher, and the nature of the pedagogy used to advance the curriculum.[3,5]

Research Context

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Amidst the quest to address these challenges and to achieve better outcomes for young children, research on curriculum thrives. One major area of inquiry focuses on the comparative effectiveness of content-specific vs more holistic curriculum, with some findings strongly supporting a holistic orientation that embraces children's physical, social, emotional, linguistic, and cognitive development and supports overall learning and development. Simultaneously, research also supports content-specific curriculum as an elixir of school readiness skills (i.e., literacy and numeracy skills).[6-8] The scope of curriculum research is also expanding to include a focus on how children approach learning and their executive functioning. Recent studies examine the relationship between curriculum and familial, environmental and contextual variables including: (i) the importance of race, ethnicity, and gender as they impact learning and development; (ii) the cultivation of diverse environments that honor family values, cultures, and languages; (iii) the use and impact of digital technologies on children's development; (iv) the development, support, retention, and compensation of the workforce; and (v) the impact of systemic variables (e.g., governance, funding, and accountability) on the quality, equitable distribution, sustainability and efficiency of services. Finally, new approaches to research are being manifest, with increasing attention being accorded qualitative and mixed methods. These shifts in how curriculum is studied reflect widespread recognition, from practitioners and policymakers alike, that children's learning must be situated and understood within a broader context of families, community, teachers, learning environments, organizations, and systems.[9-12]

Recent Research Results

While data have not yet fully addressed the range of issues noted above, progress related to curriculum and pedagogy are not only being made, but are also yielding notable findings regarding the conditions under which children learn best. Children's learning and development is enhanced when:[3,5,6-21]

- ***Children are active and engaged***. Children learn best by exploring and thinking about the world around them. As such, children need to be active in their learning, not just cognitively, but also physically, socially, and artistically. Effective curriculum ensures that important concepts are taught through projects, every day experiences, collaborative activities, and an active curriculum.
- ***Goals are clear and shared by all***. Curriculum goals should be clearly defined, shared, and understood by all adults invested in children's learning (e.g., families, teachers,

program administrators). The curriculum and related instructional strategies should be designed to help achieve goals in a unified, coherent way.

- ***Teachers have frequent**, meaningful interactions with children*. As already noted, curriculum and the content of what young children need to learn, know, and be able to do is closely linked with pedagogy and how such content is delivered. As a consequence, curriculum implementation relies primarily on teachers and the nature of teacher/child interactions. Teachers' engagement with children also allows them to regularly assess each child's progress and make adjustments in the classroom as necessary. Effective pedagogical and assessment strategies rely to a large extent on teachers' experience levels and educational backgrounds. To support effective teaching, curriculum should be linked to on-going professional learning for teachers.
- ***Curriculum is evidence-based***. The curriculum should be based on evidence that is developmentally, culturally, and linguistically relevant for the children who will experience the curriculum. It should be organized around principles of child development and learning. When subject-specific curricula are adopted, they should also meet the standards of relevant professional organizations (e.g., the National Council of Teachers of English or the National Council of Teachers of Mathematics).
- ***Curriculum builds on children's prior learning and experiences***. The content and implementation of the curriculum should build on children's prior individual, age-related, and cultural learning and be inclusive of children with disabilities. In addition, curriculum should support the knowledge that children gain from their families and communities and support children with home languages other than English in building a solid base for later learning. Effective curricula offer guidance, adaptations, and specific strategies to differentiate teaching and classroom activities according to the characteristics and backgrounds of the children.
- ***Curriculum is comprehensive***. Curriculum should encompass all areas of development including children's physical health; well-being and motor development; social and emotional development; approaches to learning; language development, and cognition and general knowledge. Rather than adopting a didactic, school-based approach in which each subject is taught distinctly and at separate times, curricula in early care and education should explicitly integrate learning across domains.

- ***Curriculum is aligned with learning standards and appropriate assessments***. Increasingly, policy-makers and practitioners alike are concerned with improving children's learning experiences. This concern is manifest in the increased attention to a systematic approach to accountability that sets specific learning outcomes (i.e., early learning standards), guidance on what content to deliver to young children (i.e., curriculum), and assessment procedures that document children's progress. However, attending to each independently is insufficient; effective curriculum is well aligned with standards and assessments.
- ***Curriculum frameworks exist and are designed to be locally contextualized***. Internationally, researchers and policy-makers have paid increasing attention to *curriculum frameworks* as key policy levers to develop and guide quality curriculum. While these documents are *not* accountability measures, they articulate broad, overarching developmental agreements that bind multiple providers under a common vision. Effective curriculum is grounded in the guidelines of a framework, but must also be flexibly individualized or localized to context.
- ***Curriculum is flexible and honors children's unique cultural contexts***. On a national or sub-national scale, this means that curriculum is culturally flexible so that it enables teachers to tailor pedagogy and learning experiences to the children and their communities. On a global scale, this manifests as a careful balance among cultural paradigms, particularly in the face of heightened Western hegemony in early childhood research and standards.
- ***Underlying early childhood systems are effectively functioning***. For curriculum to translate effectively to the classroom, the underlying early childhood *system* must also be effectively functioning. Components of an effective system include subsystems like a supported workforce; community and family engagement; comprehensive governance; sustainable funding mechanisms; robust data infrastructure; and high-quality pedagogy. For instance, in order for teachers to confidently adapt and enact curriculum, they must be well-trained and compensated; in order for curriculum to address children's needs, adequate child and program-level data must be available. Although the ways in which an early childhood system manifest will vary by context, effective systems universally require that all its components be equally supported.

Conclusions

Curriculum, or the content of what children learn, is central to supporting and strengthening young children's learning and development because it is the "front line" of children's experiences. Curriculum is different from beliefs about children, pedagogy, learning standards, and children's skills. Nonetheless, curriculum is central not only to the knowledge and skills children gain, but also to the application of particular pedagogical approaches and to the nature of teacher/caregiver-child interactions. With increasing numbers of children in early care and education programs, effective curriculum is crucial. Curriculum is also distinct and strengthened when used in combination with curriculum frameworks. In the face of increased globalization, curriculum must be guided by frameworks that build consensus on quality, be flexible to individualize, and honor diversity.

Implications

Given the diversity of young children in early care and education programs, it is unlikely that the field will come to consensus on the superiority of a single specified curriculum, even though a general consensus might be reached around the elements associated with a curriculum framework. A framework would rely on a balance between a clearly defined structure that impacts all children and flexibility that allows for individualization for children, families, cultures, and classrooms. Moreover, next generation research must discern which pedagogical approaches produce educationally meaningful effects in which domains of development, for which children, under what social conditions, and with what kinds of professional preparation for teachers. Beyond embracing the research agenda, curricula must be distinguished from curriculum frameworks, just as pedagogy is distinct from curriculum.

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