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Evidence-Based Curricula and Job-Embedded Coaching for Teachers Promote Preschoolers' Learning

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CHILD EVIDENCE BRIEF

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Preschool helps prepare children for kindergarten and can promote their long-term health, educational outcomes, and career success.[1] Evidence-based[2] curricula and job-embedded, curriculum-based coaching for teachers[3] are critical tools for delivering on the promise of universal preschool in the United States. The Biden Administration's American Families Plan, which aims to offer universal preschool to all three- and four-year-old children, specifies that universal preschool programs must use "developmentally appropriate" curricula and provide regular "job-embedded coaching" for teachers.[4] Rigorous evidence shows that some preschool curricula promote learning more powerfully than others, particularly when paired with regular job-embedded coaching.[3,5-7] However, most public preschool programs currently use curricula that are not evidence-based – that is, have not been shown to be effective using the most rigorous scientific methods with recent cohorts of children.[8] Many offer no coaching or, if they do, do not embed on-the-job coaching in classrooms and tie it directly to evidence-based curricula. To promote children's learning, narrow inequities in learning opportunities, and maximize positive impacts of preschool investments, it is critical that universal preschool programs follow the best science of early learning and use evidence-based curricula and job-embedded, curriculum-based coaching for teachers.

Preschoolers Learn More in Classrooms That Use Evidence-Based Curricula

Rigorous research shows that the best preschool curricula are developmentally appropriate – they have a scope and sequence that matches how young children learn; are play-based, fun, and engaging for children; and can be implemented by teachers in real-world settings.

- Rigorous studies have found that preschool curricula focused on one domain of learning – math, language, literacy, or social-emotional skills – produce larger learning gains for children than all-purpose curricula designed to teach all domains at once.[9-22] The What Works Clearinghouse, within the U.S. Department of Education's Institute of Education Sciences, maintains a list of these effective, domain-specific curricula. Presently, there is no single evidence-based preschool curriculum that covers all important learning areas.

- Localities have had success in combining evidence-based, domain-specific curricula to create a more holistic curriculum.[9,23] For example, a curriculum project in Pennsylvania combined language, literacy, and social- emotional curricula and found evidence of lasting benefits for social and academic learning and parent involvement compared to an all-purpose curriculum.[24]
- Children from families with low incomes, children of color, and dual language learners benefit from evidence-based curricula just as much or even more than their peers.[23,25-28] Thus, evidence-based curricula are a tool for promoting equity and narrowing disparities in learning opportunities that have been shown in national studies of preschool quality.[6,29]

To promote children's learning, narrow inequities in learning opportunities, and maximize positive impacts of preschool investments, it is critical that universal preschool programs follow the best science of early learning and use evidence-based curricula and job-embedded, curriculum-based coaching for teachers.

Job-Embedded, Curriculum-Based Coaching for Teachers Promotes Instructional Quality and Children's Learning

- Job-embedded coaching is professional development with direct observation of practice, implemented in the everyday work setting of the classroom. A well-trained coach comes regularly to the teacher's classroom to observe and provide support and feedback on curricula implementation as well as classroom organization, daily schedules, and behavior management. Job-embedded coaching is a successful approach in improving instructional quality and children's learning gains in preschool.[30]
- Rigorous evaluations show that coaching that supports domain-specific curricula is more successful in improving preschool children's learning than coaching on general best practices for preschool teaching.[9, 11, 16, 18, 21, 23, 30-33]
- Adopting evidence-based curricula and curriculum-based coaching has been shown to be financially feasible in large-scale preschool programs. A rigorous cost study of Boston's Prekindergarten program found that these elements were a relatively small portion of per-child spending.[34] Providing further evidence of feasibility, job-embedded coaching was implemented as an improvement strategy in 16 out of 18 states awarded federal Preschool Development Grants in 2014.[35]

Most Public Preschool Programs Do Not Use Evidence-Based Curricula or Support Teachers with Job-Embedded Coaching

Most public preschool programs are not implementing evidence-based curricula or curriculum-based, job-embedded coaching for teachers.

- In 2017, 86% of Head Start programs reported using one of two general all-purpose curricula – Creative Curriculum or HighScope – that are less effective than domain-specific alternatives.[14,19,36] Available data on state-funded public preschool programs find most programs also use less effective, all-purpose curricula.[8,19,37]
- Regulations matter for curriculum choices. Many states require preschool programs to choose curricula from a pre-approved list. Some states' lists only or mostly include curricula that are not evidence-based.[38]
- A 2020 report on all state-funded preschool programs found that only 14 out of 62 required job-embedded coaching for public preschool teachers.[39]

There are a Number of Ways Policies, Regulations, and Research Can Improve Preschool Quality

Effective policies – at federal, state, and local levels – are critical to ensuring that universal preschool expansions are based in the best science of early learning and effective preschool practices. Regulations can:

- Build on existing efforts to further incentivize programs to use effective instructional tools, including pairing job-embedded coaching with evidence-based curricula. Such incentives could be provided at the federal level or state level. For example, federal legislation required home visiting programs to use evidence-based models.[40] At the state level, Massachusetts is currently piloting the use of state and federal grant funds to support public and private preschool programs in identifying and adopting evidence-based curricula.[41]
- Provide additional incentives and guidance to combine evidence-based curricula in different learning domains (i.e., literacy and social-emotional curricula).
- Ensure broad access to the best scientific evidence on effective preschool curricula by updating and expanding the What Works Clearinghouse.[42]
- Build evidence on critical issues in the field, such as needs for effective, sequenced curricula for three- and four-year-olds; coaching models that succeed in virtual-only as well as mixed in-person and virtual modalities; and curricula for diverse populations that directly reduce racial and other inequities.

Following the best science of early learning is critical for delivering on the promise of universal preschool for young children. This science can be connected to policy and practice in ways that help put all children on a path towards success in kindergarten and beyond.

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