

Current Understandings of What Works to Support the Development of Emergent Literacy in Early Childhood Classrooms

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ABSTRACT—*Despite growing attention to early literacy experiences and emergent literacy perspectives, many children start kindergarten with less than optimal emergent literacy skills. In this article, I review research on efforts to identify what works to support young children's development of emergent literacy in early childhood classrooms prior to starting kindergarten. These efforts include curricula, best practices, and professional development. Such efforts show promise in improving children's emergent literacy skills, but many gaps remain and require further study. In particular, research is necessary to identify ways to improve meaning-focused skills, understand the generalizability and sustainability of effects, and translate findings into practice.*

KEYWORDS—*emergent literacy; early childhood education; curricula; teaching practices; professional development*

Young children's development of early literacy begins well before formal schooling. This perspective, now well established within the scholarly community, deviates from previous notions of reading readiness in which it was considered appropriate to wait until elementary school to engage children in activities related to literacy. Theories of emergent literacy now emphasize the continuous development of children's understanding of printed text. These theories include

skills related to understanding how print maps to language (*code-focused skills* such as phonological awareness and knowledge of the alphabet) and to building meaning from text (*meaning-focused skills* such as vocabulary, syntax, comprehension, and story grammar). Both early code-focused and meaning-focused abilities are linked to children's later reading achievement (1).

As aligned with developmental systems and sociocultural learning theories, emergent literacy perspectives also emphasize the importance of contexts and experiences in promoting development and preventing later reading difficulties. Many children—particularly those who are socioeconomically disadvantaged or have other risk factors—start kindergarten with less than optimal emergent literacy skills (2, 3). Without supports, the discrepancies between these children and their peers persist over time. However, emergent literacy perspectives suggest that enhancing early childhood experiences can put children on the path to reading success, and efforts to facilitate the development of emergent literacy have received considerable attention recently. Many scholars have sought to address questions about what works in supporting young children's code- and meaning-focused skills in early childhood classrooms prior to kindergarten entry, identifying curricula, best practices, and professional development that improve emergent literacy.

In this article, I describe current understandings and new developments in each of these areas, derived from a systematic search of literature over the last 10 years and integrated with the accumulated work on these topics. In doing so, I synthesize studies from many literatures and disciplines (e.g., child development, early childhood education, reading education, teacher education, speech-hearing sciences) and update extant treatments of these topics (1, 4) to provide a review of empirically supported methods that promote the emergent literacy of young children. I conclude by noting research topics worthy of study.

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CURRICULA

Scholars have investigated both general (also referred to as comprehensive, global, or whole child) and content-specific (subject specific, supplemental, targeted) curricula that promote children's emergent literacy development. Although many early childhood curricula may be research based in targeting code- and meaning-focused skills linked to later reading success or using efficacious instructional techniques, scholars have identified relatively few curricula that affect children's emergent literacy skills (4, 5). *Creative Curriculum* and *High/Scope* are frequently used preschool general curricula, yet in randomized controlled trials, neither improved emergent literacy skills (4). Some scholars have sought to develop more optimal general curricula. These include the *Head Start REDI* program, which has boosted phonological awareness and vocabulary skills in preschoolers, but did not affect other emergent literacy skills such as print knowledge or syntactic abilities (6). In addition, the *Evidence-Based Program for Integrated Curricula* improved listening comprehension but not vocabulary for meaning-focused skills, and did not affect children's code-focused skills (2). A recent integrated school-readiness curriculum targeting literacy, math, and socioemotional development increased both meaning-focused and code-focused emergent literacy skills in preschoolers, benefitting phonological awareness and vocabulary skills, but effects varied by implementation site (3).

Other scholars have developed and tested curricula specifically focused on emergent literacy. Although many of the curricula did not boost emergent literacy (4), some content-specific curricula have realized intended effects, notably those targeting phonological awareness (see 1). A few content-specific curricula targeting several emergent literacy skills also show promise: The *Nemours BrightStart! Program* improved children's print knowledge and phonological awareness but not language, while impacts varied across samples and measures (7, 8). *Literacy Express* improved print knowledge, expressive language, vocabulary, and phonological awareness for both monolingual English and bilingual Spanish-English learners (5, 9, cf. 4). And *Read it Again!* improved print knowledge, phonological awareness, and language (10), but boosted only print knowledge and phonological awareness (not language) in a subsequent randomized controlled trial (11).

In general, improving children's language and other meaning-focused skills has been challenging for scholars (see 12), prompting greater attention to these areas in recent research. Curricula such as *World of Words* and *Words of Oral Reading and Language Development* embed vocabulary teaching with science, math, and social studies content to improve children's vocabulary and conceptual knowledge. These curricula promoted learning of curricula-aligned vocabulary and content, but failed to generalize to broader vocabulary learning (13–15). Other curricula, such as *Story Friends* and *Story Champs*, explicitly teach meaning-focused skills to build comprehension during shared

book reading. *Story Friends* improved curricula-aligned vocabulary with limited impacts on story comprehension, but improvements did not transfer to standardized language measures (16, 17). *Story Champs* may boost story retell and comprehension for both monolingual and dual-language learners (18, 19).

The Institute of Education Sciences' Reading for Understanding Initiative has funded additional efforts to support young children's meaning-focused skills, producing three content-specific curricula for preschoolers. *Language in Motion* provides rich, systematic language instruction in the context of teaching scientific concepts of motion. Initial design studies show promising pretest–posttest gains on curriculum-aligned syntax measures and potential for transfer to listening comprehension (20). *Comprehension Monitoring and Providing Awareness of Story Structure* teaches children to monitor their understanding of stories and provides instruction on story grammar (the organization and elements of fictional stories, including setting, characters, and plot episodes). Initial results from a randomized controlled trial suggest impacts on comprehension monitoring, but not story grammar outcomes (20). *Let's Know!* and its parallel Spanish-English version, *¡Vamos a Aprender!*, were developed by the Language and Reading Research Consortium. Both provide instruction in lower level and higher level language skills (e.g., vocabulary, syntax, comprehension monitoring, story grammar and text structure, and inferencing) to support development of comprehension. Initial findings suggest *Let's Know!* improves curriculum-aligned measures of vocabulary and comprehension monitoring, but not story grammar or text structure (21).

Two final trends in research on emergent literacy curricula warrant note. First, a newer topic of research in this area combines instruction on emergent literacy with instruction on motor development. *Handwriting Without Tears* and *Fine Motor and Early Writing Pre-K* integrate instruction on fine motor skills and emergent writing, but neither has robust evidence of improved emergent literacy (22). Other new curricula integrate instruction on gross motor skills and physical activity with instruction on emergent literacy. Emerging quasi-experimental research suggests that these curricula may improve emergent literacy skills such as phonological awareness (23). Second, emergent literacy curricula intended for young children with disabilities are also being developed and tested. A recent example, *Reading to Engage Children with Autism in Language and Literacy*, facilitated engagement in shared reading and verbal responses for children with autism (24). *Teaching Early Language and Literacy* improved letter-sound knowledge, phonological awareness, and curriculum-aligned vocabulary in children with speech and language impairments but did not boost additional language, print, or writing outcomes (25). Similarly, in an initial study of the *Vocabulary, Oral Language, and Academic Readiness* program, bilingual Spanish-English learners with language impairments gained in vocabulary (26). Additional research on supporting young children with disabilities or who

are otherwise at risk for reading difficulties is being done within response to instruction frameworks (27, 28).

Overall, curricula that appear to be effective share common elements, which may assist in ongoing curriculum development. All provide content specific to developing children's emergent literacy skills. Most emphasize emergent literacy instruction that is intentional (i.e., planned) and systematic (i.e., content follows a scope and sequence that aligns with children's developmental trajectories and educational standards). Often, the scope and sequence are mapped to specific and detailed lesson plans provided for educators. Many use small groups to teach emergent literacy, either exclusively or with whole-class instruction, to meet individual children's learning needs. Finally, many emphasize the need for ongoing assessment of children's progress in emergent literacy to inform and adjust the instruction provided.

BEST PRACTICES

Research has also focused on identifying *best practices* to support young children's development of emergent literacy prior to starting kindergarten. Best practices are empirically backed instructional strategies independent of curricula. Systematic and intentional instruction, as cited earlier, is one such best practice, particularly for children at risk for later reading difficulties (29). Implicit contexts for learning literacy, such as literacy-related play opportunities and high-quality physical literacy environments (i.e., providing children with materials such as books, visual representations of print, writing implements, and literacy-related props and manipulatives), are likely insufficient for supporting many children's development of emergent literacy. Rather, adults need to be involved and act intentionally within these contexts to affect children's learning (30). Such mediation by adults, or careful scaffolding of opportunities for children to learn emergent literacy, is also recognized as a best practice.

Research on curricula suggests that instructional impacts are often domain specific, a premise tested and upheld in one recent study (29). Thus, efforts to support the development of emergent literacy in young children require attention to both code- and meaning-focused skills and their components. For example, shared book reading is considered a best practice (1). However, impacts of shared reading may depend on mediation by adults to intentionally target specific emergent literacy skills. For instance, print referencing—using verbal and nonverbal cues to draw children's attention to print during reading—affects children's print knowledge and later literacy skills (31, 32). Similarly, calling children's attention to the sound structure of words during reading promotes phonological awareness (33). In terms of meaning-focused skills, shared reading with embedded vocabulary instruction can be effective (13, 15–17), especially when coupled with extension activities. However, few studies have demonstrated effects beyond words specifically taught.

Recently, scholars have identified other best practices for promoting specific code- and meaning-focused skills. For alphabet

knowledge, studies suggest differentiating instruction according to both children and letters, simultaneously teaching letter names and sounds, using mnemonic aides, and integrating alphabet instruction with writing instruction (34, 35). Differentiating or individualizing instruction applies more broadly as a best practice for supporting various emergent literacy skills (20, 34, 36). Combining alphabet and phonological awareness instruction seems to boost both of these skills (1, cf. 29). Other recommended best practices for phonological awareness include providing concrete representations for sounds and scaffolding instruction along the full continuum of sound units (e.g., words, syllables, rimes, phonemes) and manipulations (e.g., identifying, blending, segmenting, deleting; 36), recognizing that bilingual Spanish–English learners may not learn sound units in the hierarchical order that English monolingual children seem to follow (37).

Research on language development has identified various communication- and language-facilitating strategies (e.g., recasting, expanding, open-ended questions, extended reciprocal and responsive conversations; see 12, 28, 38, 39) that can boost children's language skills (39, 40), particularly when these are integrated via dialogic reading into shared book reading (1). However, the extent to which these benefits are realized varies, especially when implemented in early childhood classrooms (12, 27, 28, 38). When considering vocabulary specifically, recent work substantiates explicit and intentional teaching of new vocabulary and providing extended opportunities to hear and use new words (13). Recent research has also examined vocabulary practices regarding selecting target words, teaching for breadth versus depth, and promoting transfer beyond taught words (14), although best practices on these topics are not definitive. Providing emergent literacy instruction in both English and Spanish for bilingual children and examining the transfer of emergent literacy skills across languages (9, 26) are also beneficial.

Best practices related to writing and technology have also been identified. Research on writing instruction has focused mainly on the elementary grades, but younger children's writing may also benefit from intentional learning opportunities (34). Recently, several best practices have been extrapolated from the literature (34), such as encouraging invented spelling and engaging in group writing activities, but these practices are untested. Scholars are also investigating the role of technology to support the development of emergent literacy. Some effective curricula are based in technology (14, 17), and electronic books and interactive media may enhance emergent literacy (41, 42), particularly when coupled with mediation by adults.

PROFESSIONAL DEVELOPMENT

The accrual of effective curricula and best practices is promising, but such practices have to be implemented to achieve intended effects. The amount and quality of learning

opportunities in emergent literacy that young children experience vary substantially, and teachers often use evidence-based best practices, such as intentional differentiated emergent literacy instruction, minimally (43, 44). Moreover, most educators use curricula without evidence that the curricula support emergent literacy skills (5). Thus, scholars have also investigated inservice professional development to encourage educators to implement effective practices. Professional development is important given the diversity of backgrounds and experiences of early childhood educators.

Professional development that accompanies specific curricula often succeeds in supporting implementation of curricula (6, 13, 45). Similarly, professional development focused on specific, discrete emergent literacy practices also often achieves desired outcomes. For example, professional development can change the way educators engage children in shared book reading to incorporate print referencing or other intentional emergent literacy instruction with corresponding effects on children's emergent literacy skills (31). Professional development can also increase educators' use of communication- and language-facilitating strategies to improve children's meaning-focused skills, although the effects of such efforts vary and do not always improve children's language skills (12, 38).

Other professional development aims to broadly support implementation of evidence-based emergent literacy practices, rather than particular curricula or specific practices. Regardless of format, most such professional development yields similar outcomes—partial or minimal effects (12, 46, 47). For example, *Exceptional Coaching for Early Language and Literacy (ExCELL)*, which provides educators with monthly trainings and in-class coaching, is being expanded to an online, web-mediated format (ExCELL-e); *ExCELL* may promote educators' knowledge of language and literacy practices, the quality of classroom language and literacy practices in educators' classrooms, and children's vocabulary and phonological awareness but not alphabet knowledge (48). As a second example, the National Head Start Association created a professional development program, *HeadsUp! Reading*, a 15-week satellite-broadcast course that is often coupled with additional in-class coaching. *HeadsUp! Reading* improved some educators' practices and children's writing, language, and comprehension, but did not affect children's alphabet knowledge, vocabulary, or emergent reading (49), and the additional coaching did not enhance outcomes (see also 5). As a third example, a recent effectiveness trial of a long-standing, state-sponsored emergent literacy professional development program did not affect any measured aspects of educators' knowledge, beliefs, or practices, making it unlikely that children benefitted (50).

Collectively, studies on professional development suggest that effects on educators and children are possible, but they also highlight the difficulties in improving children's skills, especially when professional development is implemented at scale under more authentic conditions. Therefore, we need to continue

working in this area, particularly with respect to linking changes in outcomes for educators to improvements in children's emergent literacy skills.

CONCLUSION

Current research concerning what works for supporting the development of emergent literacy shows that content-specific curricula, emergent literacy best practices, and related professional development all can benefit children's emergent literacy. Recent advances in supporting dual-language learners and children with disabilities are exciting, as are advances pertaining to integrating instruction in emergent literacy with other content domains, and using technology to facilitate learning for both children and educators. Yet many gaps remain, which points to the need for continued study.

First, few effective curricula and best practices have been identified. Moreover, the generalizability and sustainability of effects are unclear, given the dearth of replications with diverse samples and longitudinal follow-up studies. Second, despite relative success in affecting children's code-focused skills, ways to improve meaning-focused skills remain elusive, particularly those that achieve transfer beyond content that is taught directly. Finally, shifting practice to align with research findings remains a challenge. We need a deeper understanding of factors related to educators' use of evidence-based emergent literacy practices, including effective preservice education and inservice professional development, and efforts to develop curricula, practices, and professional development that are suitable and feasible for wide-scale implementation need to continue. Such work, perhaps informed by findings in other applied fields (e.g., nursing, mental health, speech-hearing sciences), is critical for scaling up what works to authentic contexts and enhancing the emergent literacy experiences of young children so they start kindergarten on the path to reading success.

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