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Article

The Comprehensive Emergent Literacy Model: Early Literacy in Context

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Abstract

The early skills of Emergent Literacy include the knowledge and abilities related to the alphabet, phonological awareness, symbolic representation, and communication. However, existing models of emergent literacy focus on discrete skills and miss the perspective of the surrounding environment. Early literacy skills, including their relationship to one another, and the substantial impact of the setting and context, are critical in ensuring that children gain all of the preliminary skills and awareness they will need to become successful readers and writers. Research findings over the last few decades have led to a fuller understanding of all that emergent literacy includes, resulting in a need for a new, more comprehensive model. A new model, described in this article, strives to explain how emergent literacy can be viewed as an interactive process of skills and context rather than a linear series of individual components. Early literacy learning opportunities are more likely to happen when teachers have a solid knowledge base of emergent literacy and child development. Research has shown that preschool teachers with limited knowledge about literacy development are significantly less able to provide such experiences for children. Teachers will be better able to facilitate all of the components of emergent literacy if they have access to, and understanding of, a model that describes the components, their interactions, and the importance of environmental factors in supporting children.

Keywords

education, social sciences, curriculum, literacy, education theory and practice, early childhood, educational psychology and counseling, educational research, teacher education, students, teaching

Learning to read has long been held as a necessary ingredient for success in school and in life. Starting children on the path to reading begins early. Children learn about the function and process of reading long before they pick up a book and decode the text. These early skills, known as Emergent Literacy (EL), include the knowledge and abilities related to the alphabet, phonological awareness, symbolic representation, and communication. The comprehension of these concepts builds over time beginning when children are very young, typically between birth and age 5. The idea of EL was introduced by Marie Clay (1966) in the 1960s. It developed further in the 1980s to challenge the then-current notion that children were not ready to become literate until reaching a specific point in time, determined by the child's age and maturity (Fosnot, 2013; Razfar & Gutiérrez, 2003; Yaden, Rowe, & MacGillivray, 2000). Since then, EL has been recognized as a vital content area in preschool curriculum, with a strong research base supporting its use (Blank, 2012; Connor, Morrison, & Slominsk, 2006; Watson & Wildy, 2014).

Existing models of EL tell only part of the story; they focus on discrete skills but without a perspective of the environment surrounding them. Yet, understanding these skills of EL—along with how they relate to one another—and recognizing the importance of the setting and context, is critical in ensuring that children gain all of the preliminary skills and awareness they will need to become successful readers and writers. Research findings since the development of early models of EL have led to a fuller appreciation of the complexities of EL, resulting in a need for the new, more comprehensive model introduced here. The new model, described in this article strives to explain how EL can be viewed as an interactive process rather than simply a series of individual components (Rohde, 2011).

The concept of EL evolved through the 1980s and 1990s and is now recognized as a combination of developmentally appropriate practice (DAP; Copple & Bredekamp, 2009) with an intentional focus on providing opportunities for children to learn about literacy (International Reading Association & The National Association for the Education of

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Young Children, 1998). DAP is a research-based framework of practices used to design educational experiences for young children. It serves as a foundation for the work of the National Association for the Education of Young Children (Copple & Bredekamp, 2009). However, research has shown that although there is strong evidence of the effectiveness of EL support and instruction, it is rarely practiced in early childhood programs (Powell, Diamond, & Koehler, 2009). In addition, research has shown that some Early Childhood Education (ECE) professionals are limited in their awareness and knowledge of EL (LoCasale-Crouch et al., 2007; Powell, Diamond, Bojczyk, & Gerde, 2008) and that little instruction in EL, or any of the individual components of EL, is happening in preschool classrooms (Justice, Mashburn, Hamre, & Pianta, 2008). There is clearly a gap between research and practice of EL in ECE programs. This disparity may be due to a lack of resources or knowledge in providing high-quality EL learning opportunities in ECE classrooms.

Many early childhood educators have recognized the importance of providing more explicit instruction for their students asking for training and support (Dickinson & Caswell, 2007; Nitecki & Chung, 2013; Winsler & Carlton, 2003). Recent work by Nitecki and Chung (2013) also indicate tension between teaching EL, using DAP, and addressing the new curriculum standards. These challenges may, at least in part, be attributed to a lack of educators' understanding of how these factors can work in harmony. Early literacy learning opportunities are more likely to happen when teachers have a solid knowledge base of EL and child development. Conversely, preschool teachers with limited knowledge about literacy development are significantly less able to provide such experiences for children (Burgess et al., 2001; Dickinson, Freiberg, & Barnes, 2011; Justice et al., 2008). Teachers will be better able to facilitate all of the components of EL if they have access to—and comprehension of—a model that describes the components, the interaction between the components, and the importance of environmental factors in supporting children. This article describes such a model.

This article will first review the history and current models of EL. Next, the comprehensive emergent literacy model (CELM) will be introduced and described, illustrating the important interactions between these components. The context of EL learning will be explained and its importance to learning will be considered. Finally, potential uses of the model, both in professional development and the lives of young children, will be discussed.

Early Research in EL

Much of the early research in EL provided support for the proposition that "growth in writing and reading comes from within the child as a result of environmental stimulation . . . the growth that has been observed occurs without the necessity for formal teaching" (Teale & Sulzby, 1986, p. xx). Yet, a close look at this research reveals that children's ability to develop EL skills depends on their access to rich literacy experiences and expert partners from whom they can learn (Connor et al., 2006; Dickinson & Sprague, 2001; Gayan & Olson, 2001; Morrow, 1990). This preliminary research was centered on how children build knowledge and skills about literacy starting very early in life. EL is founded on the theory that literacy emerges from children before they are formally taught to read. In addition, its definition goes beyond decoding—encompasses the processes of reading, writing, speaking, and listening. The child's point of view and active involvement with literacy constructs are highlighted during EL learning; similarly, the social setting in which children are learning about literacy is addressed (Mason & Sinha, 1993).

The initial work on the social implications of communication and literacy was built on the conceptual framework of EL. During the first half of the 1980s, EL researchers joined together to challenge the traditional way of thinking about the way children gain literacy skills (Teale & Sulzby, 1987). Research emphasized two basic trends: first, a focus on the cognitive processes that influence learning; and second, a renewed research interest in the sequencing of children's development (Fosnot, 2013; Teale & Sulzby, 1987). A careful examination of young children and their development led these researchers to a new way of thinking about children learning literacy.

Early research resulted in a pendulum shift away from a maturationist view of "attaining literacy" as a construct and toward a more "academic" approach to early literacy (Gesell, 1925; Morphett & Washburne, 1931; Teale & Sulzby, 1987). Some educators and others claimed that the naturalistic and maturational view of EL—in which the teaching approach was to wait for children to develop—resulted in a delay or lack of direct instruction. The outcome was many children failing to learn to read, or at least failing to gain the necessary early literacy knowledge to be successful in early elementary school (Durkin, 1978; Gates & Bond, 1936; Shea, 2011). This realization by researchers and early childhood educators acknowledged a need for a different approach to literacy learning for young children.

Early Models of EL

Two models are found in the research literature that conceptualize the common skills related to early perceptions of literacy prior to conventional literacy and their relationship to one another (Sénéchal, LeFevre, Smith-Chant, & Colton, 2001). The two, the outside-in, inside-out model and the four-component model, include language development as part of EL and are described in detail below.

Outside-In, Inside-Out Model

Whitehurst and Lonigan's (1998) model of EL describes two interdependent domains ("Outside-In" and "Inside-out") of processes and skills. It is represented as a continuum with the knowledge of context at one end and understanding of rules of letters and their sounds at the other. The term *Outside-In processes* is used to describe conceptual knowledge, such as the function of print, particularly in the context of narrative. Children's processing of the overall text, according to the authors, is where the "understanding of the context in which they are trying to read (or write) occurs" (p. 854). Whitehurst and Lonigan recognized that "comprehension of all but the simplest of writing depends on knowledge that cannot be found in the word or sentence itself" (p. 854). The outside-in end of the literacy continuum recognizes that reading is ineffective without comprehension strategies, including the use of background knowledge, to decipher the message of the writer to the reader.

The term *Inside-Out processes* describes procedural knowledge related to skills of literacy. This includes understanding how to match the smallest components of literacy, sounds, and print units (e.g., letters) together, moving toward larger units of words (Sénéchal et al., 2001).

The outside-in, inside-out model is a continuum of skills and concepts. In the middle of the model are "language units" (e.g., words) that demonstrate the merger of skills (e.g., putting letters and sounds together into words) and conceptual knowledge (e.g., inferring meaning from text). Whitehurst and Lonigan (1998) posited that to successfully transition into conventional reading, children must have both procedural and conceptual skills of literacy.

Four-Component Model

A second model, developed by Mason and Stewart (1990), also includes both conceptual and procedural knowledge of EL learning. The four-component model consists of four blocks: (a) concepts and functions of literacy, (b) writing and composing, (c) knowledge about letters and words, and (d) listening comprehension and word understanding (Sénéchal et al., 2001). *Concepts and functions of literacy* are the broad understandings and behaviors related to reading and writing. These do not include specific skills but rather an overarching perception of literacy. For instance, children understand that print is static and remains consistent over time. The *writing and composing* component focuses on words and sentences in terms of composition, but not specific letter formation or "drawing." *Knowledge about letters and words* includes alphabet knowledge and phonological awareness, including letter–sound relationships. This component comprises much more specific knowledge and skills than the first two components. Last, *listening comprehension and word understanding* relates to language, specifically narrative knowledge and vocabulary.

The four-component model contains the broad, overarching concepts of literacy (e.g., that print carries meaning), as they are interpreted by young children. It also includes specific skills that young children learn about text, language, and the intricacies of literacy (i.e., the shapes of letters). However, each of the four blocks is presented individually with little mention by the author of how the components interact with one another.

Both models have similar EL components although they are presented in different orientations. They both include conceptual knowledge about the function of reading and writing, beginning procedural knowledge of how literacy works, oral language skills, including vocabulary, and metalinguistic skills such as phonological awareness (Sénéchal et al., 2001). In addition, both models include the importance of considering knowledge beyond EL skills, for instance, background knowledge and awareness of semantics (e.g., the meanings of language) and pragmatics (e.g., the situational context of language).

The Development of EL Skills

Each individual component of EL is comprised of complex developmental sequences. EL has been referred to as a developmental continuum (Sénéchal et al., 2001; Teale & Sulzby, 1987; Whitehurst & Lonigan, 2001) but research suggests that, additionally, each component of EL is on its own trajectory of development and the components are not strictly related to one another as part of a consecutive sequence (Clay, 1998; McGee & Richgels, 2003). Researchers have long recognized and documented that young children develop oral language skills using consistent patterns and sequences (von Tetzchner, Merete Brekke, Sjothun, & Grindheim, 2005). Phonological awareness skill development follows a sequence as well, with rhyming and alliteration as the beginning and segmenting and blending phonemes later on (Goswami, 2001). Similarly, children's emergent writing develops through a series of stages from scribbling to pseudoletters to inventive spelling (Sulzby, 1989). There is not one clear path of EL development but rather a series of associated and concurrent experiences that result in the building of knowledge and skills related to the literacy process. For instance, a child's emergent writing development may be enhanced by, though not necessarily dependent on, his or her level of phonological awareness. Recognizing these stages of development within each component of EL is important in providing appropriate learning opportunities and scaffolded support.

The two recognized models (Mason & Stewart, 1990; Whitehurst & Lonigan, 1998), described above, do not address the complexities of EL. Based on new research, a

comprehensive model of EL is proposed. It describes each of the components of EL, the interrelationships between the components, and the importance of culture and community.

A New Model of EL

The CELM goes beyond a set of skills to bring four additional considerations to these existing models: (a) Each EL component has its own developmental sequence; (b) each component supports the development of other components as part of a holistic appreciation, rather than in a linear way as found in early models; (c) the importance of recognizing the environment in which children and their families live; and (d) this model connects EL components with the recommendations of three national authorities on ECE and EL learning. These distinctive aspects of CELM provide clarity to the value of each EL component as well as the interactive nature of the components.

Three national organizations have provided published guidelines and recommendations of strategies to promote EL learning in preschoolers that were used in the development of the CELM. In 1998, the International Reading Association and the National Association for the Education of Young Children produced a joint position statement on EL (International Reading Association & The National Association for the Education of Young Children, 1998). This document, *Learning to Read and Write: Developmentally Appropriate Practices for Young Children*, is still disseminated widely as a reputable source of recommended practices. The third organization, Head Start, released their Child Outcomes framework containing recommendations for all areas of child development, including EL learning (Administration on Children, Youth and Families/Head Start Bureau, 2001). Each of these organizations' guidelines was used as a means to evaluate the soundness of this new model of EL.

The CELM represents all of the components of EL in a Venn diagram of circles (see the appendix) set in a context of environmental indicators. The intersections and overlaps of the model demonstrate the holistic nature of EL learning for young children. As is true for all children's learning, EL is best learned, and understood, as knowledge that affects all parts of a young child's life. The CELM illustrates a different way of looking at the contexts children live in, and the skills and understandings they gain as they move toward conventional literacy.

The CELM model is loosely based on the work of James Cunningham (1993) and his Whole-to-Part Literacy Assessment. This assessment focuses on three components of reading. Each component is a distinct and separate ability that is necessary for successful reading; each component is also made up of parts that can be assessed to determine why children may be struggling to learn to read. The three components are (a) Word Identification, (b) Listening Comprehension, and (c) Silent Reading Comprehension. Each component consists of specific skills that emergent readers must learn and understand before they can acquire conventional literacy.

The CELM model contains three similar components, each a precursor to the components listed above. First, print awareness leads to word identification. Print awareness includes alphabet knowledge and concepts of print (e.g., book handling skills). Second, phonological awareness is closely related to listening comprehension. Phonological awareness includes skills like rhyming and segmenting sounds. The third component, oral language, leads to silent reading comprehension. Oral language includes understanding and using vocabulary, background knowledge, and semantics. There are also skills that overlap these components. Print awareness and phonological awareness overlap with skills such as understanding the relationship between letters and sounds and inventive spelling. The overlap between oral language and print awareness includes skills like using grammar and understanding syntax. The overlap between oral language and phonological awareness includes skills related to lexical restructuring, a mental organization of words using sounds rather than the meaning of words.

In addition, the CELM recognizes and emphasizes the relationship and the overlap of skills and knowledge between the major components. A fourth component, writing, includes all of the pieces of the model. Writing has a strong reciprocal relationship with the other three components (Teale & Sulzby, 1987). The skills of composition and the mechanics of writing support the skills of language development, print awareness, and phonological awareness. These components are also critical in supporting the development of the skills and conventions related to the writing process.

Writing is situated in the center of the model as it is where children can often demonstrate their knowledge of literacy concepts. Through emergent writing, children can manipulate alphabet letters, word choice, and letter/sound relationship in authentic and purposeful ways. Creating their own messages and stories, children can create deeper awareness of the components more closely related to reading. Writing is where all the pieces come together and are used to produce a new message—The children are now the initiators of literacy rather than the receivers.

The components of EL include the skills that children develop prior to conventional reading and writing as well as the conceptual knowledge of print and how it functions. There is some debate as to the specific skills to be included in EL (Sénéchal et al., 2001). It is universally understood that the theory of EL promotes learning literacy as a process (Guo, Justice, Kaderavek, & McGinty, 2012; Helland, Tjus, Hovden, Ofte, & Heimann, 2011; Lanter, Watson, Erickson, & Freeman, 2012; Sylva, Melhuish, Sammons, Siraj-Blatchford, & Taggart, 2010; Whitehurst & Lonigan, 2001).

In the next section, the four specific components of EL are described, as illustrated in the CELM, and cited by the major documents described above.

Language Development

Oral language development is a critical aspect of literacy learning (Roskos, Tabors, & Lenhart, 2004; Whitehurst &Lonigan, 2001). Children depend on language for social interaction and communication, demonstration of ability and knowledge, and acquiring new concepts (McGee & Richgels, 2003). A child's familiarity with language and vocabulary is strongly linked to his or her later literacy success (Lane & Wright, 2007). Despite the recognized importance, opportunities for children to develop oral language skills can be limited in preschool (Snow, Burns, & Griffin, 1998; Tabors, & Snow, 2001). This may be due to curriculum or instructional decisions made by educators, such as requiring children to raise their hands before speaking or teachers primarily asking yes/no questions of their students.

Researchers have suggested that there is a need to consider a wider range of oral language skills, beyond vocabulary and phonological awareness, to better understand the connection between oral language and literacy (Roth, Speece, & Cooper, 2002; Traw, 1993). In their research, Roth et al. (2002) concluded that the variables associated with early oral language development provided an initial advantage in gaining conventional literacy skills. However, much of that advantage could be mediated by effective instruction in both oral language development and early literacy skills.

Phonological Awareness

Phonological awareness is the ability to detect, identify, and manipulate the sound structure of language, along with being one of the strongest predictors of later reading success (DeBaryshe & Gorecki, 2007; Dickinson, McCabe, Anastasopoulos, Peisner-Feinberg, & Poe, 2003; Ehri et al., 2001). The importance of acquiring phonological awareness cannot be overstated. It is closely linked with most specific learning disabilities in reading (Brady & Shankweiler, 2013; Melby-Lervåg, Lyster, & Hulme, 2012). There is great significance in a child's awareness of the relationship between letters and sounds; according to Adams, it has very strong "predictive power" to identify students who may struggle with learning to read (Adams, 1998, p. 2). As Goswami (2001) determined, awareness of phonemes may need to be directly taught to some children as they may not develop that skill on their own.

Demonstrating the concept of rhyme is seen as the first indicator of phonological awareness in young children (Justice & Pullen, 2003). Rhyming, for many children, is the first time they shift their focus from the *meaning* of words to the *sounds* of language (Goswami, 2001). This may be difficult for some children as "this sensitivity to the sounds of the phonemes and the differences between them is not conscious. It is deeply imbedded in the subattentional machinery of the language system" (Adams, 1998, p. 3). It is not automatic for some children to discriminate between the sound of language from the meanings of words (Goswami, 2001), perhaps because most children learn language as communication first and only later learn to attend to the sounds.

Lexical Restructuring—Overlap Between Oral Language and Phonological Awareness

The reorganization of language by sound rather than by definition requires children to know about oral language as well as phonological awareness. This new type of organization has been referred to as "lexical restructuring" in the research (Stadler, Watson, & Skahan, 2007; Walley, Metsala, & Garlock, 2003). Lexical restructuring "is based on the premise that in the normal course of development, children's phonological representations become increasingly segmental and distinctly specified in terms of phonetic features with age" (Goswami, 2001, p. 113). It is represented in the CELM graphic as the overlap between the language and phonological awareness components.

There is great interest in determining why some children have difficulty gaining phonological awareness, primarily because it relates so closely to later reading success (Anthony, et al., 2011; Duff, Hayiou-Thomas, & Hulme, 2012). It could be argued that children with speech and language disabilities struggle because of limited vocabulary rather than an inability to learn to distinguish between the sounds of language. If a major premise of the theory of lexical restructuring is that children's ability to build this organizational structure depends on the size of their vocabulary, particularly spoken words, it follows that children with limited vocabularies, because of oral language disabilities, will have further difficulty building a system of phonemes and morphemes. Further research in examining the phonological awareness skills of children with oral language disabilities who have access to high levels of receptive and expressive vocabulary could provide insight to this query.

Print Awareness

Print Awareness is typically divided into the two primary categories of alphabet knowledge and concepts of print. Both categories contribute to awareness of how written language is constructed and used.

Alphabet knowledge. Becoming literate depends both on knowledge of language and an understanding of text systems

and symbols. In the English language, the foundation of text is based on the 26 letters of the alphabet. Alphabet knowledge consists of being able to recognize and name letters (Foulin, 2005), identify the sounds of letters (Invernizzi & Purcell, 2003), produce the letters (Stachoviak, 1996), and match text letters with their sounds (Invernizzi & Purcell, 2003; Juel, Griffith, & Gough, 1986). Specifically, the alphabetic principle, "the basic concept that letters represent segments of their own speech" (Moats, 2000, p. 10), refers to written letters and their corresponding phonemes. Letter name knowledge has also been shown to be a strong predictor of later reading success in multiple studies over the past two decades (Foulin, 2005). It is a critical skill in acquiring the alphabetic principle (Adams, 2001).

Concepts of print. The term "Concepts of Print" refers to a knowledge base about print and how it works (Strickland & Schickedanz, 2004). These concepts range from appreciating that print has different functions and that print carries a message to knowing the differences between words and letters. As with phonological awareness and alphabet knowledge, concepts of print comprehension follow a basic developmental continuum. Acquiring the concepts of words involves beginning phonological awareness along with alphabet knowledge by learning to separate speech into words and to match sounds with letters (Mason & Allen, 1986).

Comprehension Strategies—Overlap Between Oral Language and Print Awareness

Print awareness relates to oral language learning with regard to syntax, grammar, and the similarities and differences between the spoken and written word. Comprehension strategies of predicting, inferring, and reasoning are used both when listening and reading. Children learn that the setting and context matters when they are speaking and reading.

Code-Based Knowledge—Overlap Between Phonological Awareness and Print Awareness

Phonological awareness and alphabet knowledge are both used in code-based knowledge (Connor et al., 2006). Phonics, the later developing skill of matching letters with their sounds, is the first step in learning to decode text. Decoding requires knowledge of the alphabet and the sounds of language.

Writing

Emergent writing, or a child's first attempt to put marks on paper to create a message, begins long before any recognition of letters or words may be seen. At first, children are simply realizing that making marks can create meaning. Emergent writing is a process that requires the integration of phonological awareness (being able to hear and isolate the sounds of "bat" to /b/-/a/-/t/), print awareness (being aware that text carries the message), and language (being aware that the meanings of words portray a message). The seminal work of Elizabeth Sulzby (1986) first illustrated that children acquired many early writing skills and developed knowledge about the process of writing long before they were conventional readers. This was in direct opposition to how many children were learning to write in the early elementary grades. It is now understood that children can express their awareness of EL through writing.

Emergent writing is supported by all the other components of EL—language, print awareness, and phonological awareness. Children move from writing primarily through drawing and illustration, often accompanied by a spoken description of their work, to the inclusion of letters (or pseudoletters) as they gain alphabet skills. These letters will more closely represent words as children gain phonological awareness and knowledge of letter–sound relationships. Research has indicated that children who spend time writing, or in "code-focused activities," have higher levels of alphabet knowledge and word recognition than children who spent more time in "meaning focused activities" (Connor et al., 2006). Other studies point out the literacy skills children gain from writing activities during dramatic play as a way to learn about the functions of print (Einarsdottir, 1996). Through their grasp of early writing, children deepen their awareness of the other components of EL too.

Impact of Context on EL

The three, interlinked components are situated in the context of culture, community, and demographics. A child's ability to gain EL skills is influenced by these environmental factors as they dictate access to EL opportunities, the importance associated with EL, and the support children will receive from people around them to learn about reading and writing.

The previously described models (Mason & Stewart, 1990; Whitehurst & Lonigan, 1998) present children's EL as a combination of conceptual knowledge (e.g., understanding the functions of print and text and emerging [or "pretend"] reading and writing), and procedural knowledge (e.g., matching alphabet letters and their sounds and book handling skills). However, recognition of the role of the environment, and in particular social and cultural experiences, were not well captured in the earlier models. Educators in the early 2000s realized the importance of the environment in ensuring children had sufficient opportunities to interact with literacy. The learning environment could "support and extend literacy" by providing activities as well as materials beyond

just providing a place for this learning to occur (Roskos & Neuman, 2001, p. 282).

In examining environmental factors on literacy skill development, the role of culture and community must be considered. There is a strong body of evidence describing the correlations between social and cultural experiences and success in school and learning to read and write (McLachlan, 2007; von Tetzchner, Brekke, & Sjothun, 2005). Pellegrini (2001) argued that the role of social contexts, in particular through relationships, is critical in developing "literate language" in young children (p. 59). The seminal study of Hart and Risley (1995) clearly demonstrated the effect of environment, particularly the impact of poverty, on language acquisition and learning. Through these studies and others, the role that the environment plays on EL is now recognized as critical in supporting literacy growth in young children (Fosnot, 2013).

EL is learned within a context of culture, community, and demographics. As indicated in the CELM model, these three constructs are important to consider as supports or barriers to young children's access to EL learning experiences. How early learning of literacy is viewed within the culture of a child will have an impact on the availability and acceptance of EL in that community. For instance, cultures in which children are "seen and not heard," are likely to provide fewer opportunities that encourage expressive language skills. Similarly, a family that does not prioritize reading, for any number of reasons, is less likely to have a wide variety of children's books in the home. Outside the child's immediate home, the community also influences EL growth. Community refers to the surrounding neighborhoods and the decisions made by local boards and organizations, such as the provision of toddler story hours at the library or access to high-quality ECE programs. Demographics reflect the background experiences and lifestyles of both the children and their teachers. Each of these constructs has an impact on children's abilities to gain EL.

Practical Implications of the CELM

The CELM presented here provides a framework for teachers, researchers, and other professionals to understand and explore the components and contexts of EL in a comprehensive and organized way. There are four practical uses for the CELM model in ECE settings, two related to working with young children, one for professional development, and one for further research.

First, the CELM may be used as a way to structure ECE curriculum and instruction. Consistent with recommended practice in ECE, the CELM portrays a holistic view of how children learn about the many parts of EL, including the development of each part, which must be addressed. Because the CELM sets the learning of EL skills and knowledge in a culture and a community, it provides a context to the learning. Second, it may be used in determining areas of strength and need, through assessment of children's use and recognition of EL skills. Students can be assessed on individual components of EL to determine where they may need additional support or experience. On a larger scale, the CELM can be used to evaluate if the child's home context is likely to support EL learning by providing learning experiences in all areas of EL indicated by the model.

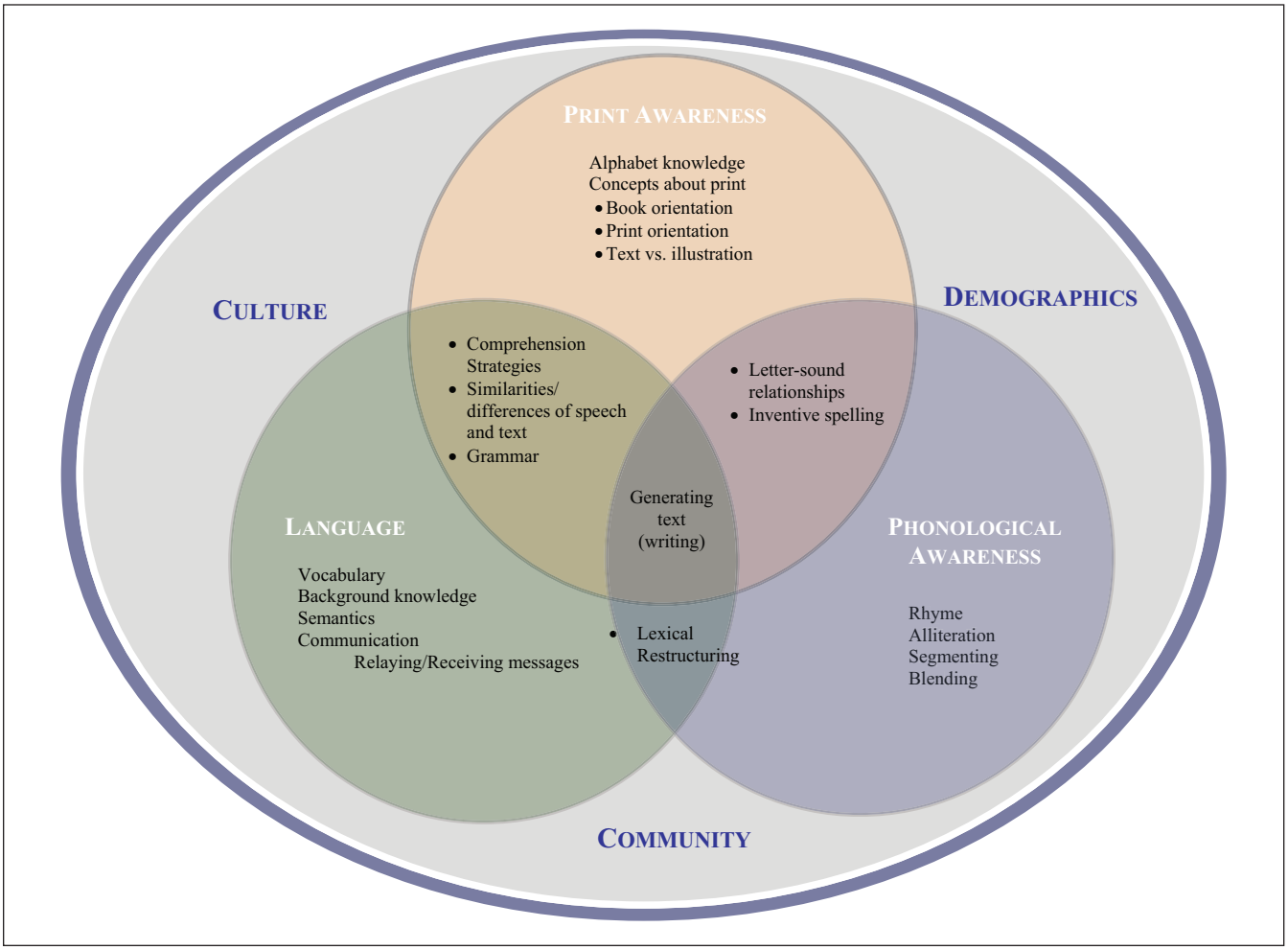
Third, the CELM can serve as a format for providing professional development to ECE teachers who need a deeper knowledge of EL. Learning can focus on particular components of EL or on the entire model depending on the needs of the audience. Beyond the EL components, the model provides a structure to help teachers learn how to support students' learning in the classroom and community.

Fourth, the model may also be used in guiding research of not only the components of EL but also the relationship between the components and how best to support young children's learning. Because it describes each component, the components' interaction with one another, and the settings that impact learning, the CELM can provide a framework to design research not only on how children learn about EL but how that learning impacts their later school success. It can also be used in research examining how a teacher can best support children's learning. For example, the structure of the model can help to examine the relationship between teachers' efficacy and confidence in providing EL learning opportunities and children's success in gaining EL skills.

The CELM provides the fields of ECE and Literacy with a new, evidence-based understanding of how young children become literate. It incorporates not only the skills and understanding of the individual components of EL but also the context in which children come to this knowledge. By providing ECE teachers with a clearer picture of EL, they will be better able to provide learning opportunities that engage children in gaining that emergent knowledge of letters, words, and sounds. In turn, children will become successful readers, writers, and learners.

Appendix

The Comprehensive Emergent Literacy Model



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