Early Childhood Literacy: Engaging and Empowering Emergent Readers and Writers, Birth - Age 5

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1. Building Connections that Support Emergent Literacy

"Children are born with wings. Teachers help them to fly."

-Shelby Stollery

Opening Vignette: Climbing Together

Marvin and Maria, both three-years-old, played with four-year-old John in the backyard outdoor area in a multi-age family home child care. There were five tree stumps of varying heights and a very large piece of a tree trunk lying sideways on the ground. The children scrambled on top of the stumps and the trunk, laughing and occasionally saying, "Watch me!" Maria and Marvin both made several attempts to climb on the large sideways log by bringing up a knee, but John was able to climb atop it more easily. Marvin frustratedly exclaimed, "I can't do it!" Maria pointed to

John, replying, "He is big!" And John said, "Get your leg up," while demonstrating a maneuver holding the top of the trunk while extending a straight leg. When Marvin made his next attempt, he bent his knee as he had done before. John coached, "No. Like this!" and demonstrated. After trying once or twice, Marvin was able to climb atop the trunk. Maria then made several attempts. Though she used the straightened leg approach that had worked for John and Marvin, she could not climb onto it alone. Marvin walked over as she struggled and nudged her further forward, and she was finally able to sit on top of the trunk.

1.1 Introduction

Young children such as Marvin, Maria, and John have diverse abilities and experiences with language. They are each at different places in terms of their physical stage of development, previous experiences, and expectations of what they think they can do. They use language in different ways. At times, they speak, beckon, or make other gestures. They laugh and smile to signal pleasure and cry out in pain, anger or frustration. They use language for enjoyment and for resolution of problems. They are listening and speaking, communicating non-verbally, and developing concepts that support their comprehension and vocabulary. They can share meaning by expressing themselves and understanding language. Young children are beginning to demonstrate that they can communicate a message through writing.

This textbook, *Early Childhood Literacy: Engaging and Empowering Emergent Readers and Writers Birth-Age 5,* outlines the connection between different areas of language

and literacy and describes strategies for supporting development and promoting instruction. Early literacy includes reading, writing, and language development. Writing includes any early writing attempts and pre-writing behaviors just as reading includes any early reading attempts and recognition of symbols and sounds. Language also includes listening and speaking (oral language) and the use of gestures and signs to communicate. The term *oral language* is commonly used to describe early language development separately from reading and writing. This text assumes oral language is a component of language and embraces the broader term to underscore the communication practices outside of listening and speaking. For example, some children use sign language or a picture board. For these reasons, the textbook will focus on language development in its totality, including oral language. This textbook is focused on birth to age 5 because early literacy development is crucial for future learning and development. This introductory chapter will explore the following questions:

- Why do we use a strengths-based approach when we consider what literacy development is?
- What is emergent literacy?
- What is the nested model of literacy?
- What definitions and terms of common literacy are important to know?

1.2 Empowering Approaches to Literacy Development

Each child has unique strengths and uses strategies they learn are successful to foster literacy development. It is crucial to start with an approach that emphasizes what children *can* do instead of what they cannot yet achieve. An approach that begins with examining deficits often over-

emphasizes what children lack instead of their capacities. Children's literacy experiences are housed within relationships and opportunities. An integrated approach acknowledges that reading, writing, and language development are connected and contextualized by children's experiences. Language development, and later reading and writing, are vehicles for comprehension, even as our increasing comprehension helps us to form each of these three areas. The components of literacy develop incrementally and they all foster the development of the other components. Literacy development requires a holistic approach, focusing on understanding the whole child across contexts and time with a strengths-based focus.

This textbook acknowledges the importance of collaboration in a strengths-based focus as it fosters cultural responsiveness and an integrated approach to learning. By starting with the expectation that there are multiple perspectives to be heard and valued, educators are better equipped to embrace and respond to the needs of children and families. Strong communication among all of the adults that make up the context of the child's life promotes the opportunities for children and families to have input and influence in the environment. This, in turn, fosters positive outcomes for children's literacy development.

Children work with stencils and sticks to explore letter formation.

1.3 What is Emergent Literacy?

Emergent literacy is based on the notion that children acquire knowledge about reading, writing, and language before they have begun any formal education (Clay, 1966, 2001; Sulzby & Teale, 1982; Whitehurst & Lonigan, 1998, 2001). This conceptualization of literacy as a developmental process that begins at birth counters previous early literacy theories that believed readiness for learning to read began with formal schooling (Whitehurst & Lonigan, 1998). Many researchers have contributed to our understanding of literacy development in the earliest years. According to Marie Clay (1966), literacy development begins early in life and is ongoing. Teale (1987) explained that children not only have particular experiences before they start school, but they also have developed interests. Emergent literacy is the result of children's involvement in reading activities facilitated by literate adults (Teale, 1982).

Sulzby and Teale (1991) define emergent literacy as the reading and writing behaviors that precede and develop into conventional literacy. These early literacy behaviors indicate a child's stage of reading and are particularly revealing in determining the approaches a child will use as they engage in the task of reading. Similarly, Whitehurst and Lonigan (1998) define emergent literacy as a "developmental continuum between prereading and reading involving skills, knowledge and attitudes that are the developmental precursors to reading and writing" (1998, p. 484). This underscores that we expect children to acquire skills over time. Additionally, Whitehurst and Lonigan (2001) have clarified that emergent reading develops in an interactive process of skills and context, rather than individual components developing in a linear fashion.

All of these definitions of emergent reading help us understand that long before children are reading books word for word, they are acquiring important literacy knowledge and skills. For example, many young children can point out commonly visited store logos with no prompting. Any adult who has ever heard a toddler in the backseat point to the fast food restaurant and scream, "fry-fries!" has witnessed emergent reading. It is not simply about the quantity of skills a child develops before appearing to be a fluent reader. Rather a child's literacy develops over a long period of time, with early skills supporting the growth or emergence of new skills.

Emergent literacy and early literacy are often used interchangeably, but this textbook will use the term emergent literacy, encompassing everything a child knows about reading and writing before they become proficient. Emergent literacy can be thought of as the totality of the language capacities, knowledge, and skills a child possesses even before developing the ability to turn that knowledge into reading in ways that are measured as conventional skills. Children are developing reading, writing, and language concurrently during their

earliest years. All of the key concepts in emergent literacy occur on a developmental continuum and involve stages of learning.

1.4 Emergent Literacy Areas

The National Literacy Panel (2010) defined literacy by identifying and defining skills, both in the earliest stages as precursor skills and later stages as conventional skills. We can examine behaviors evident in emergent literacy, including three broad areas of literacy skills: language development, reading, and writing, which can be further broken down into specific indicators.

Vignette: What's on the Menu?

Marvin and Maria are playing in the dramatic play area. Marvin and Maria are both cooking, and Marvin brings a plate of food to the stuffed bear seated at the table. Marvin looks at the bear and says, "Do you want ketchup?" Maria shakes her head and says, "We don't have ketchup." Marvin speaks for the bear and says, "But, ketchup is on the menu." Marvin walks over to the stack of menus that are part of the play area and mimics reading the menu. He then says, "Ketchup is not on the menu." He then scribbles on a small strip of paper and gives it to the stuffed bear saying, "Here is your bill." Maria responds, "K-ketchup! K-ketchup! K-ketchup!" in a sing-song voice as they continue to play.

This interaction displays many of the characteristics of emergent literacy behaviors. Marvin and Maria are engaging

in conversation and connecting stories to their experiences. They pretend to read and pretend to write as well as use oral language to communicate their ideas. These types of social exchanges provide an opportunity to practice the behaviors that will help prepare children to proficiently read and write.

1.4a Language Development

Language development tends to be conceptualized as receptive language, expressive language, and the interaction between communicators. Receptive language involves receiving, interpreting, comprehending and decoding. Expressive language is the production or encoding of information. Speaking, listening, and non-verbal communication allow children the opportunity to use words and gestures to express ideas and feelings. Language requires an understanding of vocabulary (choice of words), context (how and when words are used), and language conventions (rules for using words in meaningful ways). For example, a child may use different vocabulary or tone of voice with a sibling than they might with a stranger or a grandparent. Language may also be non-verbal through the use of sign language, gestures, and non-verbal cues (facial expressions and body language). Language development is pivotal to the growth of a child's reading and writing development. In the vignette above, we see that Marvin and Maria are using language to express and receive information as they debate whether or not ketchup is on the menu.

Pause and Consider: Attunement

As you interact with young children, how attuned are you to their facial expressions? Do you notice their gestures such as pointing? Do you review their non-verbal reactions such as squeals and eye gaze? Children "speak" in many different ways even beyond the use of words. What strategies can we use to make sure we are listening to what they need us to know?

1.4b Reading

Reading is a complex process. It requires readers to continually decode and comprehend a written message. Decoding requires the reader to connect letter symbols and sounds, while comprehension involves understanding the meaning of written text. The report of the National Reading Panel (NICHD, 2000) identified five key components of reading. These five areas are (a) phonemic awareness, (b) phonics, (c) fluency, (d) vocabulary, and (e) comprehension. While these five components are important, the original report did not address emergent reading practices in birth to five-year-old children. A more expansive definition of reading would include a variety of observable behaviors and skills exhibited before a child is able to connect sound-symbol relationships or become fluent readers. Children are engaging in many prereading tasks and preparing for conventional reading in their earliest years. The report of the National Early Literacy Panel indicated that preconventional reading skills include print concepts, alphabet knowledge, print knowledge, phonological awareness, vocabulary, and oral language (National Institute for Literacy, 2008). When Marvin picks up the menu to "read it," he is engaging in emergent reading behaviors.

1.4c Writing

Writing progresses in stages and in a bidirectional fashion with reading. While reading is a manner of receiving communication, writing offers a way to visually represent and produce communication. Sulzby and Teale (1991) indicate that scribbling as intentional writing can be observed in children as young as 18 months. They go on to say that scribbling represents the beginnings of writing for most children. Eventually children will move from scribbling to increasingly sophisticated markings in order to communicate meaning to themselves or others. In the example with Marvin and Maria above, Marvin acts out this expectation of shared meaning when he hands the teddy bear a bill. These emergent writing behaviors help prepare children for conventional writing later.

1.5 Nested Literacy

Literacy includes language, reading, and writing, which are interrelated concepts that reflect and support a child's overall thinking. Within these concepts are discrete areas that support the development of the broader concepts listed above. Literacy development is contextual, occurring within the supportive environments of the home and school, where family members and teachers support the development of the child through interactions, location specific opportunities, and relationships. We have developed a model to illustrate how this learning occurs, and we have chosen to organize the book around these central concepts (see Figure 1.1).

Figure 1.1 Nested Literacy Model

Nested Literacy Model
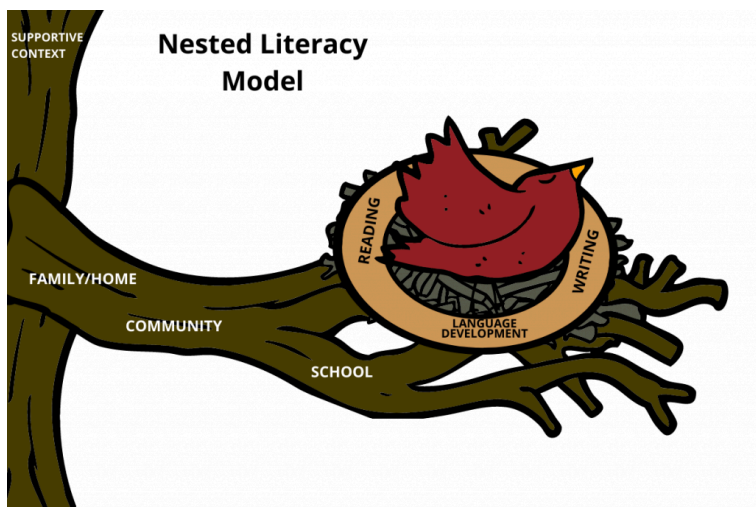
1.5a The Nest

The overarching literacy concepts frame the nest and surround the bird. The three concepts, language development, writing, and reading are interconnected and collectively support the child's literacy development. A child's capacity for developing their reading, writing, and language skills is continuous. In other words, as the child continues to engage in meaningful interactions with others, reading, and writing, they will expand and enhance their proficiencies within each literacy concept. While the overarching literacy concepts are continuous, children bolster their literacy knowledge when they acquire discrete literacy skills as well. Discrete skills (e.g., directionality of text, phonemic awareness, alphabet and word awareness,) support children's literacy progression. In contrast to continuous literacy concept development, once a child acquires a discrete skill, that knowledge is then used by the child to engage in subsequent literacy experiences.

1.5b The Bird

In the nested literacy model, the child is in the center, represented in our model by the bird. Children bring with them into their learning environments prior knowledge, language experiences, and print knowledge. Their experiences bring opportunities for the child to strengthen the literacy concepts (i.e., language development, reading, and writing) and acquire new knowledge. As the child interacts with their environment and is provided with literacy-rich opportunities, the child's emergent literacy abilities develop and grow. The child uses these abilities to engage family members, classmates, and others, establishing a continuous and iterative cycle of literacy learning.

1.5c The Branch

The home/family, community, and school environments are the wider contexts in which the child is quite literally nested. As a child interacts with the environment, they develop expressive and receptive language, reading, and writing skills. The tree branch supports the nest and the child as they continue to grow and construct meaning while engaging in social interactions. The tree branch literally provides a scaffold for the child and highlights the importance of a supportive environment. Rich literacy interactions and cognitive growth are enhanced when the environmental factors and contexts (e.g., school, community, family, health, economic) provide a positive and healthy space for children to explore, interact, and engage. All of these elements will be explored in detail in subsequent chapters and continue to demonstrate the interactions among the child, the emergent literacy components, and the broader environmental factors that enhance children's emerging literacies.

1.6 Textbook Organization

We hope that this text will help you understand the wider picture of how emergent literacy develops and provide concrete strategies for incorporating literacy rich opportunities for young children into your classroom. Part I (Chapters 1-3) illustrates development in the early years and the theories that inform best practices for literacy. Part II (Chapters 4-6) addresses contexts for learning, environmental supports, and assessment. Part III (Chapters 7-10) addresses language development, reading, and writing, and presents the progression of literacy development.

To enhance readers' engagement with the book, we include a number of features to promote educators' visualizations of a variety of literacy concepts and practices. Each chapter uses vignettes to illustrate children's literacy experiences. The vignettes are drawn from our collective experiences working with young children and families over the years. Throughout the chapters, we also integrate *Pause and Consider* boxes to provide places for readers to stop and reflect on essential concepts as they are presented. At the end of each chapter, we provide a *Key Take-Aways* box followed by a *Resource* box with links to complementary materials for educators to consider. Embedded within each chapter, icons representing the bird, nest, or branch are also included to support the reader's attention back to the *Nested Literacy Model*. Finally, to provide readers with windows into early childhood classrooms, the book also includes photographs of young children immersed in literacy experiences. Readers will notice that many photos include children and educators wearing masks. Rather than remove these images, we intentionally retain the photos to serve as historical reminders of the essential role early educators played in supporting our youngest children and their families throughout the global pandemic. We value the work early educators do to nurture

every child, and we hope this text extends the literature available to early educators in meaningful and personally relevant ways. We hope you enjoy the journey.

National Association for Education of Young Children: https://www.naeyc.org/

Virginia's Early Learning & Development Standards (ELDS): Birth-Five Learning Guidelines. https://www.doe.virginia.gov/early-childhood/curriculum/va-elds-birth-5.pdf

Zero to Three: https://www.zerotothree.org/

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Image Credits

2. Recognizing the Power of the Early Years

"There's been a revolution in our scientific understanding of babies and young children. We used to think that babies and young children were irrational, egocentric, and amoral. Their thinking and experiences were concrete, immediate, and limited. In fact, psychologists and neuroscientists have discovered that babies not only learn more, but imagine more, care more, and experience more than we would ever have thought possible. In some ways, young children are actually smarter, more imaginative, more caring, and even more conscious than adults are."

-Gopnik, 2009, p. 5

Opening Vignette: Harrison's Glove

One winter morning, Ms. Juanita sees that Harrison is quickly teetering back to his cubby during free play. She watches him search in his coat pocket and realizes that he is looking for his new gloves that he wore to school. She walks over to the cubbies and says,

"Harrison, are you looking for your gloves?" He nods, "yes," and continues to reach into the pocket of his coat and then says, "Here!" Ms. Juanita, responds saying, "Look! You found one glove. Where could the other glove be?" Harrison responds by immediately looking in his other pocket. He pulls his hand out empty and then makes an upset face. Ms. Juanita says, "Oh no. Your other glove isn't in your pocket?" Harrison replies, "Missing? No! Missing." As she can see that finding the glove feels important to the child at this moment, she proceeds to ask Harrison questions about where the glove could be and the last place he had it. She turns the search into a game and supports Harrison until he finds the glove at the bottom of his cubby under his boots. Once he has both gloves, together they count each finger as he pulls the gloves onto his small hands. Harrison says, "Need gloves now. Have to go to store." Ms. Juanita replies and says, "Ohhh…you are going out to the store now? Are we out of food in home living?" Harrison nods his head, "yes," and smiles as he walks over to get a paper bag to collect the groceries. Ms. Juanita jots down a few observations in her notebook as she notices some skills in communication, counting, and self-regulation that are new for Harrison.

2.1 Introduction

We know a great deal about what happens during the first five years of life and how critical development during this window is to future success (Center on the Developing Child, 2007; National Research Council & Institute of Medicine, 2000). This

knowledge also has key implications for literacy development and early childhood educators' practices. For these reasons, we are opening this textbook with a broader discussion about some of the key scientific discoveries about the brain. We hope this information and the subsequent resources help frame the discussion about literacy learning and give early childhood educators the tools to advocate for young children. This chapter will answer the following questions:

What do we know about brain development and how it impacts children's vision, hearing, language, cognition, motor skills, and social/emotional competence?

How do the adults in children's lives play key roles in fostering brain architecture?

Why are early childhood educators, in specific, such a dynamic factor in overall brain development and laying the foundation for literacy learning?

2.2 What We Know About the Brain

Children enjoy looking at books in an early learning space.

There is little argument that brain science has elevated the discussion about the importance of development from birth to age five (National Scientific Council on the Developing Child, 2007; IOM & NRC, 2015). These years are fundamental in brain growth in a way that is unique from other time periods. What we do in these years matters–the risks are more pronounced and the opportunities for enrichment more impactful. Babies' brains are roughly one quarter the size of an adult brain; however, at birth a baby has 100 billion neurons

(UNICEF ECARO & ISSA, 2016). Neurons are cells designed to carry messages from one part of the brain to another part. All of these billions of neurons are present in the brain at birth, but most are not connected. The brain continues to develop throughout the lifespan; however, more than a million neural connections, or synapses, are made each second in the first few years of life (Center on the Developing Child, 2007). Graham & Forstadt (2011) explain,

> Each individual neuron may be connected to as many as 15,000 other neurons, forming a network of neural pathways that is immensely complex. This elaborate network is sometimes referred to as the brain's 'wiring' or 'circuitry.' As the neurons mature, more and more synapses are made. At birth, the number of synapses per neuron is 2,500, but by age two or three, it's about 15,000 synapses per neuron. This is like going from 100 to 600 friends on Facebook, and each of those friends in turn, is connected to 600 more people! The neural network expands exponentially.

Because of the extensive neural connections during early childhood (see Figure 2.1 below), this age range is considered one of the "sensitive periods" when the brain is naturally geared toward learning. Brain researchers tell us that the brain is more malleable or has more "plasticity" in early childhood. This means that during the first few years of childhood the brain is more susceptible, and this susceptibility can have two inverse impacts. Ideally, early experiences prepare young children for the future by establishing capabilities when development is most responsive to stimulation. However, it is also possible that in a less than ideal setting, the young child is more vulnerable to the absence of these essential experiences resulting in the risk of future brain dysfunction (National Research Council & Institute of Medicine, 2000).

Essentially, the simple circuits that are built during

early childhood enable complex circuits to more easily build onto the initial pathways (Center on the Developing Child, 2007). A literacy example of how these pathways work is how verbally labeling an object depends upon the earlier ability to differentiate and create the sounds required for that word in the child's language. Additionally, the ability to verbally label an object then leads to the skill of grouping words into phrases and using this language to read or write words and phrases. If these circuits are used over and over again, they become more efficient, but those that are not used fade away or are "pruned."

Figure 2.1 Neural Connections in Early Childhood
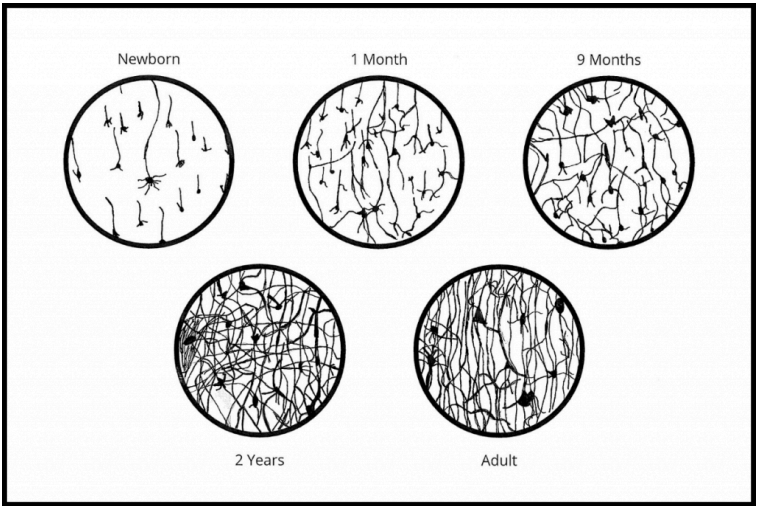
Image is based on Conel, J. L. The postnatal development of the human cerebral cortex. Cambridge, MA: Harvard University Press, 1975.

There are a number of ways that brain architecture is impacted during the birth-to-five window. The development and strengthening of circuits forms the foundation of, among other things, emotional regulation, motor control, cognition, language development, and more. Figure 2.2 shows three

different brain functions that develop sequentially. You will notice that all three functions expand significantly in the first five years and are directly connected to children's literacy development. The first, sensory pathways, are important for initial communication and support the development of language. We will spend an entire chapter in this textbook (see Chapter 7) on language, the second function. Language plays a critical role in building foundational literacy competencies and develops in distinct but overlapping stages; however, the quality of language that children hear impacts development. The last function displayed in Figure 2.2 is cognition. This includes memory, sustained attention, mental flexibility, the ability to make a plan, among other skills. Researchers also know that gross motor skills, such as crawling, walking, and balance, are predictive of cognitive function and impacted by brain development. It is clear from the brain research that these functions are critical for overall development and impact children's literacy foundation.

Figure 2.2 Human Brain Development by Age
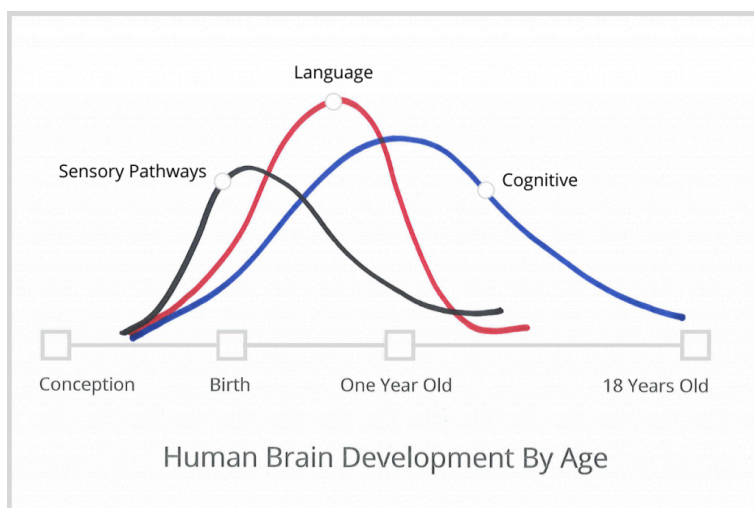
Image is based on Nelson, C. A. (2000). Credit: Center on the Developing Child

Another function of the brain not shown in the figure is social competence. Research has shown that children's ability to identify and express emotions, cope with strong feelings, engage in self-regulation, and develop empathy in early childhood are all key markers to forming successful relationships later in life and becoming a productive member of society (Levitt & Eagleson, 2018; National Scientific Council on the Developing Child, 2004). A number of studies have shown that children who have acquired these skills by kindergarten have an increased rate of graduating from high school, attending and completing college, and finding and maintaining employment in adulthood (Jones, Greenberg, & Crowley, 2015).

Children develop social skills as they interact with teachers in the classroom setting.

This research also showed an inverse relationship between low levels of social skills and increased predictability of substance abuse behavior, involvement in the justice system (e.g. being arrested), and needing public assistance. It is clear

that supporting children's emotional foundation by the end of preschool is vitally important. An emotional foundation is important for social competence and also impacts children's success in school.

Brain development is impacted by many factors including genes, relationships, environments, and experiences. The quality of the environment and experiences impact how genes are expressed and how the brain architecture is structured. These elements are also often tied to the type of relationships that children establish with adults and collectively build the foundation of the brain's structure. The figure below (McCain, M., Mustard, J.F. & McCuaig, K., 2011, p. 39) shows how these factors interact with brain development.

Figure 2.3 Factors Influencing Brain Development
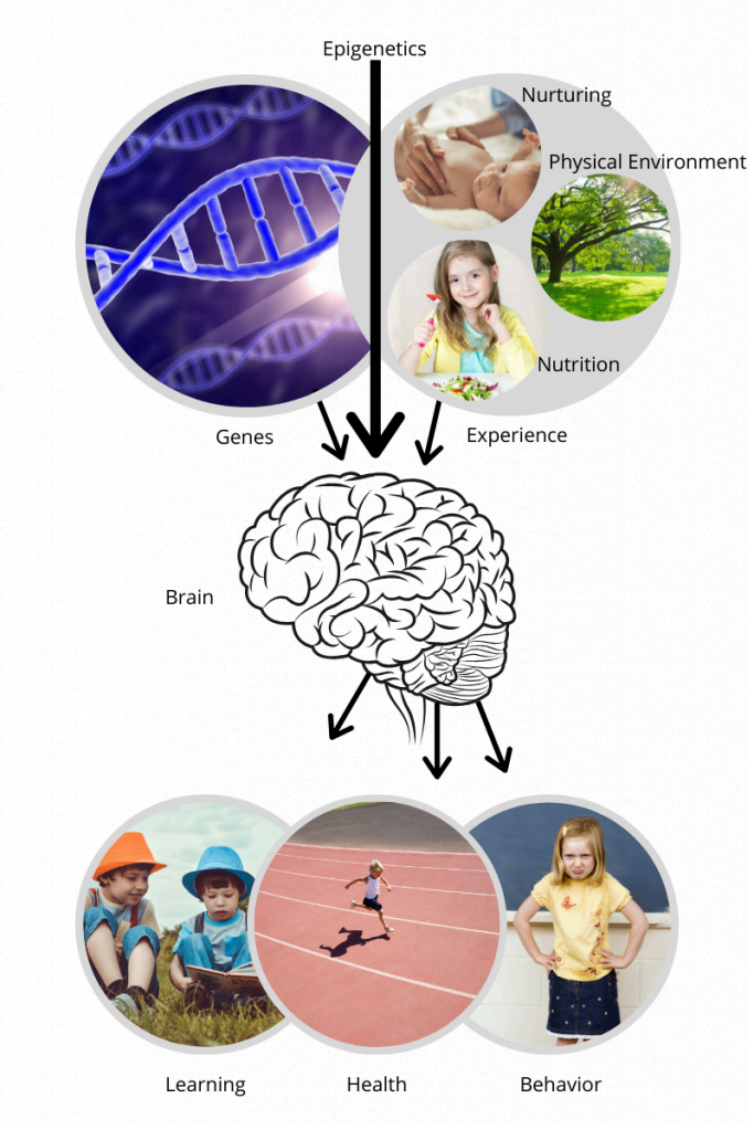
Image adapted from McCain, M., Mustard, J.F. & McCuaig, K., 2011, p. 39.

The brain changes in many amazing ways during the early childhood window, but precisely for this reason, there are also factors that can have a negative impact on development. It is important for early childhood educators to understand the impact that trauma and adversity can have on the developing brain. The vast promise of early brain development is a tremendous opportunity to impact children's entire school experience as well as future life trajectory. But with this opportunity also comes significant challenges if children are experiencing trauma. Stress creates a physiological response in the body, which is healthy in small doses, but toxic stress from traumatic events negatively impacts brain development. Continually elevated cortisol levels can be toxic for the developing brain and have serious implications for learning and behavior (Center on the Developing Child, 2007). As important as these implications are, it is also critical to know that this is not necessarily the end of the story. The impact of toxic stress can be mitigated by developing resilience through relationships.

2.3 The Role of Adults in Children's Brain Development

The rapid growth of the brain during birth to age five puts an increased emphasis on the importance of the adults in the child's life during this timeframe. As we discussed in the previous section, brain development is impacted by various factors and adults influence the vast majority of these factors. For instance, adults determine what types and the

variety of environments and experiences children are exposed to, including in the home, community, and school. Adults also play a vital role in the quality of interactions and relationships that are developed with the child. These interactions and relationships play a key role in children's brain development.

2.3a Promoting Interactions with Children

Interactions between educators and children can take place in various ways, such as playing together in the block center.

There has been a great deal of research done on the importance of interactions between adults and children. Brain researchers refer to this interaction as the "serve and return" response (Center on the Developing Child, 2007). If you watch a young child carefully, they are regularly reaching out for interaction with adults. Think of this as the "serve" in a tennis match. The adult then has the opportunity to "return" the ball by responding to the child in some way. These serve and return

interactions are vital for brain development and are one key way that adults support young children's development. Filming Interactions to Nurture Development (FIND) delineates five steps to practice serve and return interactions with young children (see Figure 2.4 below).

Figure 2.4 Serve and Return

1. Notice the serve and share the child's focus of attention. Pay attention to what the child is focused on in the moment.
2. Return the serve by supporting and encouraging. Acknowledge that you see they are engaging with you.
3. Give it a name! Verbally label what you see the child is looking at, feeling, or doing.
4. Take turns... and wait. Keep the interaction going back and forth, making sure to give the child a chance to respond.
5. Practice endings and beginnings. Notice when the child is done with an interaction or ready to shift focus.

Additional Resources

The Center on the Developing Child has created a number of resources and videos that show how these steps look in action. Click on the link below to see how the five steps of serve and return interactions could look in a variety of settings:

Pause and Consider: Serve and Return with Harrison's Glove

Return to the opening vignette and consider how Ms. Juanita moved through the five steps of the serve and return model with Harrison. Questions to consider: How did Ms. Juanita focus on what the child needs in this situation? How did she verbally label objects to support Harrison? What strategies did Ms. Juanita use to continue the interaction and shift when the child was ready?

2.3b Nurturing Relationships with Children

While relationships are important to children's development for many reasons, the impact on brain development in many ways hinges on the quality of the relationship. Relationships play a key role in the serve and return process (or interactions) because brain researchers have found that this format works best when a caring relationship has been established with the child (National Scientific Council on the Developing Child, 2007). Researchers have found that "mutually rewarding relationships" are key to further brain development.

The presence of caring relationships with adults that result in quality interactions lays the groundwork for continued

brain development. These types of relationships also create secure attachments, which have been shown to positively impact children's emotional regulation and cognitive functioning (Center on the Developing Child, 2007). As with the impact of trauma, it is important to note what the absence of secure relationships does to children's brain development. National Scientific Council on the Developing Child (2012) notes,

> When decreased responsiveness persists, the lost opportunities associated with diminished interaction can be compounded by the adverse impacts of excessive stress activation, the physiological effects of which can have lifelong consequences. This multidimensional assault on the developing brain underscores why significant deprivation is so harmful in the earliest years of life and why effective interventions are likely to pay significant dividends in better long-term outcomes in learning, health, and parenting of the next generation.

It is clear that children without secure adult attachments will have difficulty engaging with other adults and children in the classroom, directly impacting their further brain development. Early maladaptive relationships can create a cyclical problem; few secure relationships in early childhood can create difficulty developing secure attachments in the future.

2.4 Importance of Early Childhood Educators in the Equation (BRANCH)

Teachers create opportunities for engaging in serve and return when they join chil

As adults who play an important role in the lives of children, early childhood educators play a critical role in brain development. However, the level of importance of this workforce has in many ways historically been undervalued. For instance, early childhood educators are typically the lowest paid in the field, compared to their peers in the K-12 system. On average, early childhood educators make merely $10-$13 per hour (Loewneberg, 2018). Also, standards and competencies

have varied widely in this workforce, due in large part to an uninformed perspective that working with young children requires less skill. Knowing what we do now about the critical nature of brain development, it is clear that this workforce is at least as important if not more important than other educators and that there are different, but equally important competencies required (IOM & NRC, 2015).

Looking at the importance of early childhood educators from a numerical perspective, the number of children throughout the United States in care and education settings from birth through age five is over 60% of the population (Childstats.gov, 2018). With well over half of children in the U.S. being cared for and educated by someone in addition to the support they receive in the home, it becomes clear that the work of these educators has a significant impact on children's development. Having a highly skilled workforce is vital to ensure that we capitalize on children's learning potential.

As discussed in the last section, secure attachments are vitally important. Early childhood educators have the capacity to build these interactions and relationships as well as develop the environment and experiences to foster deep learning and lasting brain connections. These connections encourage development through authentic instructional programming that considers the context of the child and their construction of knowledge. Through scaffolding, the effective educator guides this development and the abilities of the child emerge.

Although educators often cannot change the trauma children may be experiencing, it is important for early childhood educators to recognize and understand the signs of trauma. Educators can connect families to services that can help alleviate the effects of trauma as well as address and minimize its impacts in the classroom. Because trauma can have long-term impacts on brain functioning, trauma-

informed practices have become a hallmark of publicly funded prekindergarten programs. These programs focus heavily on the socio-emotional development of children in recognition of its profound impact on learning and well-being. Often, traumas from a child's or family's past may manifest as behavioral or learning difficulties in the classroom. A safe and healthy learning environment is paramount to successfully guiding the development of children experiencing the effects of trauma. The good news for early childhood educators is that many of the factors that build the foundation of the brain can be positively impacted by our work. Because the brain functions in an integrated fashion, learning and development are also integrated and can impact each other. In short, when we are exposing children to a new word, material, or experience, we are also building their brains. We know that learning is an active process and occurs within the context of social interactions (Levitt & Eagleson, 2018). The choices that educators make in the classroom to actively engage children through play can have a lasting impact on children's lifelong learning trajectory.

Key Take-Aways

We have learned a great deal about the important changes in brain development occurring in young children. Vision, hearing, language, cognition, motor skills, and social competence are all impacted by the experiences children have in the first five years of life. The adults in children's lives play key roles in fostering brain architecture, and early childhood educators, in specific, can be a dynamic factor in overall

brain development and laying the foundation for literacy learning.

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3. Examining Theories that Support Literacy Development

"Teaching can be likened to a conversation in which you listen to the speaker carefully before you reply."

Opening Vignette: A Teacher's Morning

Ms. Tori entered her three-year-old classroom carrying materials for her dramatic play area, currently

presented as an apple orchard shop. There was a puppet stage that could double as a countertop, aprons, a hay bale, tin pie pans, giant beige pom poms that almost looked like peeled apples, felt pieces, and wooden apples and apple pieces. The children had a written list of apple products with a picture next to the words. As Ms. Tori checked the apple orchard center once more, she considered that children learn by engaging with each other and wondered what she might add to encourage the children to play and interact with each other. She considered what songs they might sing in group time this week and what kinds of books would familiarize children with the concept of apple orchards and apple products.

3.1 Introduction

The understanding of theory enables educators to consider the ways children are exposed to and interact with language. Educators apply this knowledge to enhance teaching ability and support literacy learning. In the vignette above, Ms. Tori carefully considers a variety of ways to stimulate children's language development. She uses picture cues, written words, songs, and books to draw on the children's prior knowledge and introduce new concepts. Ms. Tori considers the age and stage of the children as well as how her practices foster literacy. She considers what the children already know, the concepts they are learning, and the concepts she wishes for them to learn. These practices are based on broader behaviors, skills, and concepts that explain why and how children grow and develop. It is not enough to merely provide experiences for children, we should have a rationale for why we engage them

in certain practices. Theory gives us a framework and a logic *for* our practices. Theories help us to organize the knowledge we have, and they help us to make predictions about what might occur in the future.

Figure 3.1 Developmental Theories

Some theories focus on the skills reflected by children as they engage with the world and move through developmental stages (constructivist theories). Other theories focus on the broader context of the child (ecological/contextual theories), and some focus on the child's construction of knowledge while also focusing on the immediate surroundings (sociocultural/cooperative theories). Using theory as a framework builds our scientific understanding of how children grow and develop. The major developmental theories covered in this chapter have been widely used both to verify and refute ideas and to create road maps for early learning environments and practices. Each section in this chapter discusses a broad theory of cognitive development and then a specific theory focused on literacy development. This chapter will explore the following questions:

What theories focus on the child's skills and behaviors?

What theories focus on the child and the immediate environment?

What theories focus on the wider context?

3.2 Constructivist Theories

Constructivism emphasizes the individual child and defines indicators of development as the child continues to grow. Children actively construct knowledge based on their stage of development and previous knowledge. As children engage with their environment, they create internal mental structures to comprehend their experiences (Piaget, 1962). Constructivism may also present children's growth and development as a series of progressive stages. Stage theories help educators recognize children's accomplishments, anticipate areas of growth, and provide intentional literacy experiences. Piaget's cognitive developmental theory examines a child's developmental stage and how they acquire and categorize information internally (Piaget, 1962). Pertaining to emergent literacy progressions, Frith's theory of reading acquisition presents stages of development as young readers acquire an awareness of alphabetic systems (Frith, 1985).

3.2a Piaget's Cognitive Developmental Theory

Jean Piaget's cognitive developmental theory is a form of constructivism. According to cognitive developmental theory, children construct their own learning through interactions and experiences in the environment. Piaget (1962) argued that we are constantly organizing our world by categorizing information and determining ways of applying this information. In the vignette above, Ms. Tori has created an opportunity for children to access the categories of information they have already acquired (e.g., apples are red, green, and yellow) and use this knowledge to engage in discovery play in the apple orchard center.

Several key concepts are important for understanding Piaget's theory. The units we use to organize our understandings are called schemas. Schemas include not only a concept like "birds fly," but all of the associations used to develop the concept through past experiences. Piaget believed that we form our schemas through a process called adaptation, which allows us to create categories and subcategories for emerging schemas. There are two types of adaptation: assimilation and accommodation. Assimilation means that we take new information and squeeze it into an existing schema. This can happen whether it makes sense or not, such as trying to fit a peg into a hole, whether it is square or round. Accommodation literally means to make room for something. For example, when most people have houseguests, they accommodate them by altering their sleeping and eating arrangements and their schedules. Assimilation would suggest that hosts told the guests to forage in the fridge for themselves, find a sleeping bag, and figure out where to sleep. Assimilation makes no room—the schema does not change. But accommodation means that there is now room to create or understand something in a new or different way. The process takes place as a result of disequilibrium, which reflects the

state a child is thrown into when they receive information that is new. Humans generally experience disequilibrium as uncomfortable, so we generally try to stay in a state of equilibrium, a comfortable cognitive state, until or unless we are exposed to new information that does not fit into our existing schema (Piaget, 1962).

Vignette: Broken Birds

Three-year-old Li has developed a schema that birds fly. This is a reasonable schema based on Li's experience seeing birds fly in her neighborhood and places she has visited. Today she visited the zoo with her classmates and saw ostriches for the first time. After observing the ostriches, Li turned to her classmates and said, "The birds are broken." She had noticed that they do not fly. Because Li already has a schema "birds fly" and the non-flying birds have thrown her into disequilibrium, Li has decided that the birds are broken. She has NOT decided that the schema is incorrect. Thus, she has assimilated the ostriches in the "birds fly" schema, with a bit of a footnote that these birds are broken. This allows Li to return to a state of equilibrium as she has assimilated the new information. It takes multiple exposures to a violation of our expectation, or multiple instances of disequilibrium, in order for us to choose to accommodate new information and create new schema. Later that day, Li visited chickens who cannot fly high in the air. Perhaps that second time, she

labeled them broken birds or she might have started to consider that some birds do not fly. The third time, Li visits the penguin house and sees definitive evidence that some animals, who are clearly birds, do not fly. At the point where Li creates a new structure that divides birds into "birds that fly" and "birds that do not fly," she has engaged in accommodation. This is crucial for all forms of cognitive development and has numerous applications to literacy learning when children must decide on the rules and usage of language in all its forms and when they engage in communication to express themselves about the world around them.

Piaget also developed a set of four stages, with individual substages, to map out a range of expected, observable behaviors for children (1962). The sensorimotor stage closely corresponds with infancy and toddlerhood. The preoperational stage is associated with preschool years. The concrete operational stage covers the elementary years, and the formal operational stage applies to adolescence and adulthood. These constructs are outlined in the chart "Piaget's Stages" (see Table 3.1) and help us to formulate ideas about what would be expected for children at particular ages. Understanding the ages and stages delineated by Piaget (see Table 3.1) helps us to consider the importance of sensory experiences for infants and toddlers.

Table 3.1 Piaget's Stages

Piaget's Stages of Cognitive Development

Stage	Approximate Age Range	Characteristics	Example
Sensorimotor	Birth to about 2 years	The child experiences the world through the fundamental senses of seeing, hearing, touching, and tasting.	Children may put new objects in their mouths (e.g., the parent's cellphone).
Preoperational	2 to 7 years	Children acquire the ability to internally represent the world through language and mental imagery. They also start to see the world from other people's perspectives.	Children start using words and phrases to communicate their desires (e.g., "cookie").
Concrete Operational	7 to 11 years	Children become able to think logically. They can increasingly perform operations on objects that are only imagined.	Children can tell the difference between their own perspective and another person (e.g., "I can see out of the window, but you cannot.").
Formal Operational	11 years to adulthood	Adolescents can think systematically, can reason about abstract concepts, and can understand ethics and scientific reasoning.	Children can consider hypothetical situations (e.g., What if I need something in an emergency and there is no adult to ask?).

With regard to language development, parents and educators are encouraged to sing, talk, and tell stories to children; we couple that with cradling a child or clapping our hands together. We know that children in the sensorimotor stage are learning about their world by touching and being touched, sniffing items, putting everything in their mouths, looking around, and listening with avid interest. Children use these experiences to create schema to apply to the world around them and this fosters their ability to communicate orally and start to perceive symbols. For example, when a child builds a tower of blocks, they start to learn how many blocks can be stacked along with efficient strategies for stacking them. At that point, they can then add blocks to their mental schema for items that can be stacked on top of each other. This knowledge then creates space for a child to use language to express their zeal (or disappointment) in how the block-stacking is going and to beckon others to join in.

Children construct learning by interacting with their environment, such as when stacking blocks.

Upon entering the preoperational phase, children use symbolic thinking—including language—to communicate their thoughts and ideas. They were able to do so during the sensorimotor phase by indicating and pointing and using some language, but in the preoperational phase, they do so with complexity. Additionally, in the preoperational phase, they can use language to express thoughts about objects or people that are not immediately present. An older infant may point at the elephant while at the zoo, but a preschooler may talk about the elephant they saw at the zoo on a previous day. This greater sophistication reflects children's ability to engage in symbolic thinking. Children in the preoperational phase need opportunities to develop their increasingly complex language. Providing opportunities for children to engage in pretend-play, participate in social conversations, and use language to solve tasks promotes children's use of complex language.

3.2b Frith Theory of Reading Acquisition

Literacy experts also use a stage model to describe children's literacy progressions. Although the various stage models of reading have some distinctions and focus on different elements of reading processes, they all share an approach which focuses on children moving from one stage to another with increasing complexity and include features that build on the previous stage. One literacy model is Uta Frith's theory of reading acquisition. In Frith's theory, children acquire literacy by moving through particular stages that are developmental and associated with both age and experience. Frith includes three stages of reading acquisition in her model (see Figure 3.2). The first stage, the logographic stage, is characterized by instant recognition of symbols, images, or words. Children demonstrate emerging logographic understandings when they read out familiar logos like Target's bullseye or McDonald's golden arches. In the second stage,

the alphabetic stage, children begin to use letter symbols to represent the sounds they hear in individual words. Children in this stage demonstrate an emerging understanding of sound and symbol relationships, such as writing /kt/ for cat. The child may hear the beginning sound and ending sound of cat, but the internal vowel sound is not yet recognized. These early approximations demonstrate that they can hear sounds and represent them, but not always completely or correctly. The third stage, the orthographic stage, involves the internalization of spelling patterns and children begin to recognize and reproduce words with increasing automaticity. In this stage, readers do not need to sound out familiar words, though they pause when confronting new words or letter combinations. For example, a child may quickly read the word "kick" but pause to consider how to read the more complex word "knife" because the /k/ is silent. In each of these stages, children master greater complexities of thought and language and teachers must adjust their approaches in order to best foster the child's growth (Frith, 1985).

Figure 3.2 Frith Theory of Reading Acquisition
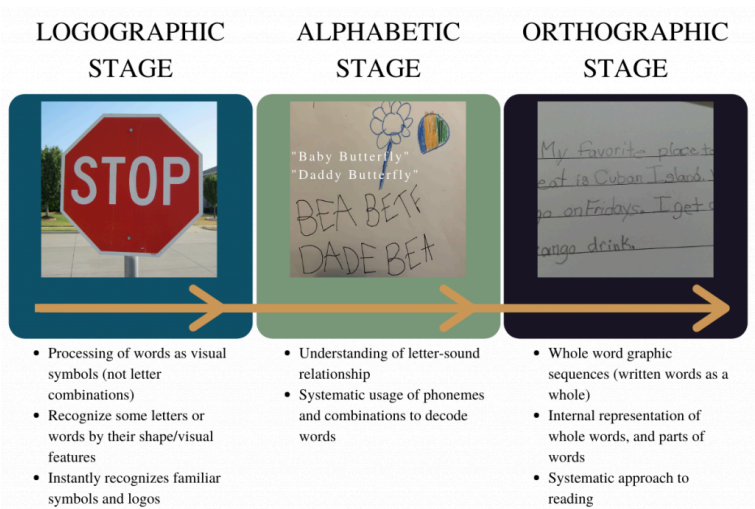
Constructivist stage models have many iterations that metaphorically look like stair steps, a spiral, or an increasing sloped line. But, in every case, the image implies that the child is acquiring new and unique skills that capitalize on the previous point and move the child to the next point. The stages are successive and developmental, beginning in infancy. As children master each successive stage, they still retain the skills they attained in previous stages. Literacy stage theories acknowledge that before children can read the list of what is for sale at the orchard, they benefit from repeated exposure to environmental print, letters, letter sounds, and other literacy experiences. This is why intentional educators (like Ms. Tori) use picture cues next to the words on the list of what is available for purchase in the orchard shop. Deliberate actions like this support children's emergent literacy and honor the developmental nature of the process.

Piaget's and Frith's stage theories place an emphasis on seeing the child move forward from one set of capacities to the next more complex set of capacities. Both Piaget and Frith emphasize the process of observing what the child's behaviors and skills reflect about their thinking. This approach is helpful for educators because it fosters an understanding about where the child is and gives a map for where the child needs to progress next.

3.3 Sociocultural Theories

Sociocultural theories bridge the gap between constructivist approaches and ecological approaches by emphasizing cooperation. These theories emphasize the immediate environment and include educators' analysis of

children's observable skills and behaviors to present children with the next valuable learning moment. Children develop language skills individually, but they do so within a cooperative learning context as peers, family members, teachers, and others engage, support, and teach them. Vygotsky's sociocultural learning theory is notable for focusing on what the child can do, while also suggesting that a child's learning is supported when the right amount of instruction is provided at the right time. Marie Clay's theories and definitions of emergent reading provide us with a framework for understanding individual children's prior knowledge and readiness for different literacy experiences. These theories focus on the interactive nature of the child's capabilities, experiences, and interactions with others.

3.3a Sociocultural Learning Theory

Vygotsky's sociocultural learning theory emphasizes the social aspect of children constructing their learning (1986). Vygotsky believed that cognitive growth was a result of interactions between people, after which a child internalizes learning. According to this theory, children learn most effectively by engaging meaningfully with someone who is more experienced. Vygotsky developed the concept of the zone of proximal development. He defines it as "the distance between the actual developmental level as determined by the independent problem solving and the level of potential development as determined through problem solving" (Vygotsky, 1978, p86).

Figure 3.4 Zone of Proximal Development

Zone of Proximal Development

| WHAT THE STUDENT CAN DO ON THEIR OWN | ZPD | WHAT THE STUDENT CAN'T DO ON THEIR OWN |

WHAT THE STUDENT CAN DO WITH ASSISTANCE FROM OTHERS
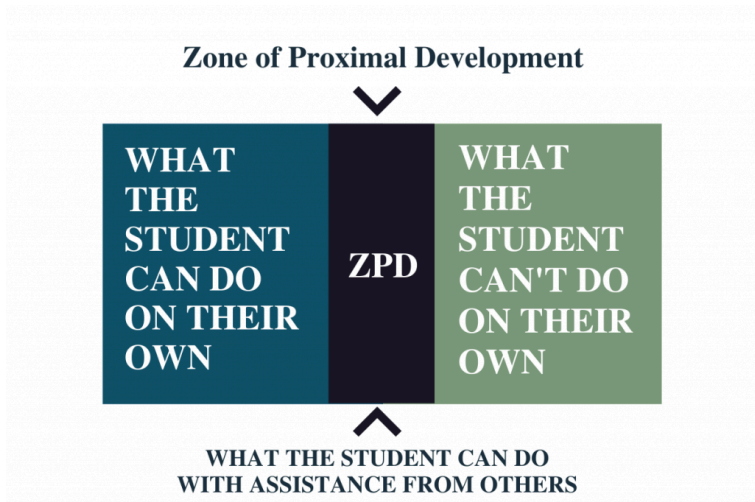
Vygotsky recognized a more knowledgeable other could be another child, a family member, a teacher, or anyone who can provide some support for a task. The support itself is called scaffolding. Construction workers, painters, and others use physical scaffolds when they work to reach areas beyond their abilities if merely standing on the ground. In this same way, the support of a more experienced peer giving guidance or direction creates a support for the child to be able to construct their own learning. As a child masters a task, they need less scaffolding and eventually the scaffold disappears (Vygotsky, 1978). For example, many young children have help in learning to wash their hands. An adult may show the child how to acquire the soap, rub their hands vigorously, and rinse. Over time, children need less help with the task, and the scaffold is removed as children are able to wash their hands independently. Children are in progressive zones of proximal development when they are still needing some guidance to wash their hands. Vygotsky placed great importance on the social experience, which provides the scaffold. This theory

allows for the notion that children construct their learning, but it also emphasizes that construction requires some help from others.

Children learn through social interaction.

the approaches of Piaget and Vygotsky can be understood by looking at one aspect of oral language. Children can often be observed engaging in a running stream of commentary as they play and solve tasks. Piaget referred to this action as *egocentric speech* while Vygotsky termed the practice *private speech*. The difference in naming reveals what each theorist believed about language and cognitive development. Piaget indicated that egocentric speech was an additional marker of egocentrism, a hallmark of the preoperational period (Piaget, 1962). Egocentrism means that children's capacity for perspective-taking or understanding another person's point of view is not yet developed. Piaget argued that egocentric speech reflects the developmental stage the child is in. He reasoned children speak aloud to themselves in this stage because they are unable to understand or perceive that another person is hearing them. Vygotsky indicated it is not merely a lack of perspective-taking that causes children to talk to themselves, but that children do this because they are trying to solve tasks (Vygotsky, 1978). For example, children frequently talk to themselves when they are learning to tie their shoes. Vygotsky indicated that private speech never truly disappears, but instead goes underground as children grow older. It is true that while most adults will not talk to themselves in public, many people will refer to speaking out loud when working through a hard task, such as being lost in traffic or trying to create something complex. Both theorists agree that perspective-taking is limited in this stage, but where Piaget says that egocentric speech is merely a

reflection of the child's development, Vygotsky says that private speech is being actively used as a tool.

Is our language resultant from our cognitive development, or does language lead our cognitive development? Is it possible that both of these approaches are true?

3.3b Marie Clay's Emergent Literacy Theory

Marie Clay's emergent literacy theory recognizes a close relationship between the instructional scaffolds used by educators to promote young children's emerging reading, writing, and oral language skills (Clay, 1991). Drawing on the work of Vygotsky, Clay argues, "The essence of successful teaching is to know where the frontier of learning is for any one pupil on a particular task" (Clay, 1991, p. 65). In this way, Clay extends the value of understanding where an individual child's zone of proximal development *is* so that educators take advantage of learning spaces to enhance a child's literacy learning (p. 65). Clay's emergent literacy instructional practices underscore the interactions between educators and children and focus on the social supports and contexts children and educators co-create.

Clay recognizes children construct their learning within the context of their own developmental histories, prior knowledge, and previous experiences with complex tasks (Clay, 1998). The focus of emergent literacy then is on the *ways* that children process information and the subsequent *strategies* that children learn to use to solve a problem. Moreover, as a member of the early learning community, educators encourage children to share the learning insights they achieve so they, in turn, become valuable literacy resources for their

peers (Clay, 1991). Clay embraces teacher scaffolding as a valuable support for children's literacy learning and views teaching as an interaction between the child and the educator (or other expert). Thus, it is important to have clear instructional approaches that support the child's ability to discover and use strategies to support their learning with regard to the knowledge that literacy development is unique for each child (Clay, 1998). Understanding emergent literacy approaches means that teachers consider the opportunities that children have had to complete the tasks set before them including their access to previous experiences and prior knowledge. In other words, whether children will choose to replicate creating an apple pie by using beige pom poms, a circle felt crust piece, and a pie tin may depend upon whether they have ever seen anyone create an apple pie from scratch.

3.4 Ecological/Contextual Theories

Ecological theories emphasize the child's system and context. Ecological theories of human development focus on the interrelationships between broader environmental systems and their impact on a child's development. In contrast to the theoretical approaches presented earlier in the chapter, ecological theories look more broadly at the complex levels of the child's environment and how this impacts learning. Bronfenbrenner's ecological theory examines the social resources and relationships that directly and indirectly impact a child's development. Bronfenbrenner focuses on multiple

environments of the child, including the contexts of home, neighborhood, community, and culture (Bronfenbrenner, 1979). Friere's critical literacy theory focuses on understanding the social, cultural, and political contexts of learners (Friere, 1985). These theories take an ecological approach as they are focused on understanding the child in the backdrop of time, place, and circumstance.

3.4a Ecological Theory of Human Development

The ecological theory of human development emphasizes the contextual interrelationships that exist between individuals, families, the physical environment, the community, and the cultural norms and values of a society. Each of these relationships exerts contextual influence on the individual and is depicted by concentric circles embedded within one another. The nested spheres of influence are represented in the graphic "Bronfenbrenner's Ecological Systems" (see Figure 3.6) and include the microsystem, mesosystem, exosystem, and the macrosystem, with each system based on a greater understanding of influence (Bronfenbrenner, 1979).

Figure 3.6 .Bronfenbrenner's Ecological Systems

Macrosystem
Economic and political system, dominant beliefs and ideologies

Exosystem

Mesosystem
(Interaction of any two microsystems)

Microsystem
(Bidirectional influences)

The Developing Child:
age, sex, health, abilities, temperament

Religious hierarchy

Local religious community

Mass media

Peer group

Shopping centers

Parents' friends

Home

School

Neighborhood

Transit system

Parents' workplace

Educational system

Community and government agencies

Chronosystem
(Dimension of time)

Changing personal and societal conditions over the life course

The microsystem includes the interaction a child has in their immediate surroundings. This includes the child's home and the early learning setting as well as other environments that are consistent and immediate. The interaction between the parent and the child or the teacher and the child forms a microsystem. The mesosystem brings together two settings containing the child. For example, when the early learning teacher and the parents interact, it is taking place in the mesosystem. The exosystem is external to the child, although it influences the child indirectly. The exosystem consists of areas the child does not enter. Examples of the exosystem include the parent's workplace. Yet, the parental workplace influences

the child because it influences the parent, which subsequently affects the interactions between parent and child. Consider, for example, how children and families are impacted differently depending on whether or not the workplace provides access to health care, sick leave, or family leave when needed. The macrosystem consists of the norms and mores that influence culture and customs. These beliefs, expectations, and rules underlie the activities and institutions that constitute our everyday lives. For example, policies around mandatory school attendance were created in the macrosystem and influence jurisdictions (also in the macrosystem) to provide schools for the community (exosystem), for families to enroll the child (mesosystem), and for the child to attend (microsystem). At each of these junctures, there are interactions taking place in the various systems indicated and the systems ripple in and out accordingly. Ripple out occurs as the child has needs, the family responds, the local environment reacts, and social change can occur. In some places, early learning centers open at 5:00 am to accommodate super-commuters. This is an example of how the needs of the child and family create change in the community. Other times, larger policies affect whole communities or families in ways that impact their practices. For instance, when airbags were required in new cars (macrosystem), companies started installing them (exosystem), and families stopped putting car seats in the front seat and instead put the child in the backseat.

As the child interacts with others in the supportive context, the child is exposed to new discrete language skills, such as vocabulary. In the Northern Virginia area, many children are familiar with the word "pentagon" and are aware it has five sides, even before this is introduced as a vocabulary word. The Pentagon, which serves as headquarters for the United States Department of Defense, is an important military, political, and economic presence in the Northern Virginia area (macrosystem). It is also a workplace for some families

(exosystem). The Pentagon's distinctive, five-sided shape is visible from several major roads in the area and a child might easily see it from the car, view it on a tour, or hear others speak about it (mesosystem). This regular exposure influences the words that adults or peers use while regularly interacting with the child (microsystem), and this influences a child's likelihood of hearing the word, "pentagon." As a result, children comprehend and use the word "pentagon" earlier than some peers in a different part of the country or state.

The ecological approach, similar to the nested literacy model, looks at the totality of language experience over time. Just as the branch and tree provide the context for the bird in its nest, children's wider backdrop for their experiences influences what they learn to value and what they learn to master. The "Pentagon" example focuses on vocabulary, but the same principle applies for other discrete skills such as phonological awareness and alphabetic knowledge. Each time the child masters a new discrete skill, it ripples out and interacts with the wider concepts of language development (receptive and expressive language), reading, and writing. This builds the capacity to think and understand. Each time a child is exposed to the wider concepts of language, writing, and reading, it helps to foster abilities in the areas of the discrete skills. Indeed our discrete skills and language concepts are connected in much the same way that microsystem interactions are. It is difficult to say that speaking leads to reading or that reading leads to speaking. It is more accurate to say that they are transactional and interactive and develop concurrently.

Our understanding of language development must take into account environmental aspects beyond the immediate situation containing the child. This means that the literacy interactions that a child experiences in their environment influence the family and vice versa, causing influential ripplings in and out. Children first learn what is

familiar and contextual. Development is influenced by multiple systems, including the family, school, neighborhood, and larger ecologies that encompass more immediate systems (Bronfenbrenner & Morris, 2006). These systems are the context in which children learn.

3.4b Freire Critical Literacy

Paulo Freire (1985) defined critical literacy as the capacity to analyze, critique, and transform social, cultural, and political texts and contexts by having a thorough understanding of the experience of the student. Freire went on to suggest that in order to truly reach students, one must be aware of their problems, struggles, and aspirations, while also considering the power dynamics implicit in the ideas and materials they are exposed to and the relationships they develop. Additionally, these understandings should be followed by a reciprocal exchange and a willingness for action in ways that would meet the learner where they are.

Critical literacy acknowledges teachers have the power to send implicit messages about the importance and meaning of some information above others. Teachers as decision-makers determine the value of particular lessons, goals, materials, and the structure of the learning day. Children receive feedback about the relative importance of ideas within teacher and classroom interactions. These differences are contextual and socially constructed, even as they are transmitted back and forth between speaker and listener, between environment and child, and among each of these characters as they move through their day (Luke, 2012).

For example, a critical literacy approach prompts us to stop and acknowledge our decision to choose the apple orchard shop in the opening vignette as our theme for the dramatic play area. We are making choices as educators about the types of play contexts that have value and the types of

vocabulary that should be introduced. For example, Ms. Tori may also choose to include a picture card that says "manzana," the Spanish word for apple, in order to support the home language development that she has already identified in the group of children she teaches. Even more broadly, critical literacy challenges us to question the value of the apple orchard center for learners. Would an apple orchard dramatic play area hold the same relevance for children in south Florida as it would for children in northern Michigan? The answer is, it depends. When answering questions about instructional practices, critical literacy asks us to consider: What is the intended goal? What are the children's interests and how do they connect to their real-world experiences? If not, what would make these practices relevant and impactful for the children? Are the children given only the materials for apple pie, and might it be relevant to include materials for other types of apple desserts, such as apple empanadas? What types of play would be acceptable in this play area? Critical literacy challenges teachers to always consider whether the educational environment and experiences they choose allow children to feel seen and heard as they acquire knowledge.

Early childhood teachers plan for instruction.

3.5 Using Theory in Practice

Theories matter because they inform our practice. When we stop to evaluate if a literacy activity seems appropriate for the age and stage of the child, we are grounding our practice in a theory (Piaget/Frith). When we set up our classroom with learning stations to encourage children to learn language from one another, we follow a theoretical construct (Vygotsky/Clay). When we stop to ask about the environmental influences on the family and, subsequently, the child's language development, our practice reflects our understanding of the factors that Bronfenbrenner and Friere spoke about. Understanding the theoretical frameworks that guide our practice helps us to be more effective and intentional in the classroom.

As you prepare and engage in your learning environment, what do you take into account? How do you think about the ages and stages of the children? How do you think about the wider context? How do you incorporate the voices and influence of children and families? How do you think about ways to foster interaction among children who are very experienced with a concept and those that are less experienced? Are these approaches contextual, cooperative, or constructivist? How can you use theory to understand what is occurring with a child, and how will you apply this understanding to your practices?

Key Take-Aways

Theories help us to understand child development and to plan our instruction and environments accordingly. We must understand the ages and stages that children are in and allow children to construct their own learning. We emphasize children interacting socially because they learn from one another and from themselves as they do so. Teachers should create circumstances for children to learn new concepts and explore with materials, always keeping in mind that they are making decisions about what materials and

lessons children will be exposed to. Finally, it is imperative to understand context so that children have every opportunity to make meaningful connections.

Additional Resources

Piaget Society Resources for Students: https://piaget.org/resources-for-students/

Critical LIteracy: Promoting Equity in Early Childhood Settings: https://www.hekupu.ac.nz/article/critical-literacy-promoting-equity-early-childhood-settings

Frith's Model of Reading Acquisition: https://esol.britishcouncil.org/sites/default/files/attachments/informational-page/Frith%27s%20model%20of%20reading%20acquisition.pdf

The Importance of Bronfenbrenner's Bioecological Theory in the Classroom: http://libres.uncg.edu/ir/uncg/f/J_Tudge_Importance_2017.pdf

Marie Clay's Literacy Processing Theory: https://readingrecovery.org/reading-recovery/teaching-children/early-literacy-learning/

Paolo Freire Institute for Learning: https://www.freire.org/paulo-freire/

Virginia's Early Learning & Development Standards (ELDS): Birth-Five Learning Guidelines.

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Image Credits

4. Understanding and Valuing Children's Home Literacy Environments

"Every child needs one adult that is crazy about them".

-Urie Brofenbrenner

Opening Vignette: A Tale of Two Teachers

Head Start teachers, Jane and Mallory, are attending a professional development workshop. The first session of the day, "Early Literacy and the Home Environment," presents the attendees with strategies to support families' home literacy environments. The presenters encourage the participants to utilize tools such as a home literacy screening inventory to determine which families might need additional support. During the discussion they highlight the value of literacy rich home environments where parents or caregivers

regularly share books with children. The presenters conclude the workshop by emphasizing the implications of early home environment on a child's language and literacy development.

After the workshop, both Jane and Mallory have time to reflect on the content and their own literacy experiences. Jane experienced a very traditional middle-class upbringing. Her mother was a stay-at-home mom and she has vivid memories of her mother and father sharing books with her. Their home was filled with literacy materials and her parents often read for pleasure. She even remembers the excitement of the day she got her first library card.

Mallory had a very different early literacy experience. Mallory spent most days with her grandmother. Their days were spent baking treats and tending to the garden. Mallory has memories of her grandmother telling her stories. The stories were sometimes based on their faith, and at other times they were full of magical creatures in far away lands. As a teenager Mallory learned that her grandmother could not read. This explained why her grandmother filled their days by telling stories, rather than reading books.

4.1 Introduction

It is well-known that parents and caregivers, and the home literacy environment they create, directly impact a child's emergent literacy development (Weigel, Martin, & Bennett, 2006; Waldrep, 2005). Beginning at birth, children

acquire language and emergent literacy skills within social contexts. The opening vignette demonstrates the beauty of language and literacy development in different homes and family environments. Emergent literacy skills are shaped by the home and preschool literacy environment (Saracho, 2017). Children enter school contexts with a wealth of language and literacy experiences from the home and community contexts they experience. It is important to use a strengths-based perspective when considering the differences in family literacy practices. In doing so, educators guard against deficit perspectives that may privilege some literacy experiences over others. In the opening vignette, it might be easy to conclude that Mallory entered school with vulnerabilities based on family structure and her grandmother's literacy level. Yet, Mallory's family's rich oral storytelling practices supplied her with a wealth of knowledge about narrative styles including plot, theme, and character development. In addition, Mallory has learned a great deal about how to create dialogue in a way that captures a listener's attention. Jane's experiences in a book rich environment also provided her the opportunity to see reading as a source of pleasure. Although Jane and Mallory had very different early experiences, both children entered school with a love and eagerness for literacy. Both educators realized that the workshop had presented an incomplete view about how home environments can support children's literacy development. Early childhood educators are tasked with the responsibility of celebrating the individuality and strengths of each child and their family. Partnering with families promotes a strong foundation for successful literacy learning. In order to do this, educators must recognize there are many contexts and methods in which families transmit and share in literacy experiences.

Early childhood educators collaboratively plan literacy activities.

This chapter will explore the following questions:

What role does a child's family play in literacy development?

How do families' social contexts differ?

How can educators in early learning settings work with families to promote literacy?

4.2 Family Role in Literacy Development

Family literacy development refers to parents and their children using literacy practices and strategies together at home. These literacy experiences are usually informal and occur within the context of the normal family routine (Wasik, 2012). These experiences, compounded daily, support the influence of the family on a child's literacy development. Many decades of research support the vital parental role in nurturing a child's literacy development. Consider the literacy-rich moments illustrated in the exchange between Ava and her father getting ready to go to the store.

Vignette: Grocery Store Trip

Two year-old Ava is happily drawing a picture while her father is creating a list for the grocery store. Her father mentions that he is planning to buy grapes at the grocery store. Ava proceeds to scribble across the paper and exclaims, "I added grapes to my list, too."

This scenario demonstrates the value of an everyday interaction that takes place in many homes. The daily conversations and interactions between children and adults in the home provide models of how people use reading, writing,

and language to engage with the world. Every day parental interactions create opportunities for adults to model literacy skills. Early childhood educators have the responsibility to honor the language and literacy expressions present in families' daily lives. When early educators focus on developing partnerships with families and champion the role of the family as a vital space for meaningful literacy interactions, they help promote family literacy.

4.2a The Home Literacy Environment

The home literacy environment is ordinarily defined as activities facilitated by family members at home that relate to literacy learning, and literacy resources in the home combined with parental attitudes towards literacy learning (Weigel, Martin, & Bennett, 2006). Home literacy environments include practices such as shared picture book reading, storytelling, conversations and singing songs. Literacy contexts reflect multiple variables and include a child's interests, library experiences, and how parents and children enact a variety of literacy practices in the home (Myrtil, Justice, & Jiang, 2019). Bronfenbrenner's human ecological theory suggests that children must be understood in the context of their families and communities (Rosa & Tudge, 2013). The ecological environment is a set of nested structures, each couched inside the subsequent one, similar to a set of Russian dolls where each doll of decreasing size fits inside the next. The innermost setting would include the developing child and their immediate setting, likely home and classroom. Bronfenbrenner's approach closely matches the nest model, where not only is the child considered, but also the immediate environment and the wider context.

Sharing books with children is an important way to promote literacy in the home.

More recently, the concept of funds of knowledge (Gonzalez, Moll, & Amanti, 2005) acknowledges the influence of the household and community. Funds of knowledge encompass families' traditions, experiences, information, and practices. When educators and supportive adults establish a relationship founded on the common goal of successful and healthy development of the child, it supports the aims of cultural responsiveness, equity, and inclusion. For example, when a child shares their enthusiasm for a television program their family is watching together, it draws upon many of the child's own funds of knowledge. While the child is drawing on a shared family and cultural experience in the show itself, the child is also engaging with notions of occupations and outings, values, chores and activities and vocabulary. A child's experience shopping at the grocery story is another example of funds of knowledge. A child may learn about quantity, money, shopping practices, cultural norms around food, and patterns

of interacting, all while learning and practicing signs and symbols. Drawing on socio-cultural perspectives, educators embrace the funds of knowledge children possess utilizing these resources and skills to build productive pedagogy. In this way, educators acknowledge that every child comes to school with previous experiences that influence their interactions with language and support their emerging literacies.

The home environment of each family is complex and personal, and includes economic, social, and cultural influences. The complexity of home and community environments explains the diversity we see amongst school readiness nationwide. The home literacy environment, parental expectations for their child's literacy success, and parental characteristics are influencing factors in literacy development (Senechal & Lefevre, 2002). Ideally, prior to entering kindergarten, children have the developmental precursors for reading well-established. This includes skills children learn from shared book reading and oral storytelling experiences, exposure to rhyming structures, and opportunities exploring alphabet material. Literacy development is "rooted" in experiences young children have prior to formal schooling. These informal literacy experiences take place daily in the home environment and involve interactions with caregivers. Examples include caregivers reading to children and an emphasis on environmental print. The caregiver might point out a word or sign to the child. It could also sound like a family member singing a familiar song with a child, making up silly words that rhyme, or saying the letters in the child's name.

4.2b Literacy Materials and Experiences

There are many ways families engage in early literacy experiences in the home. Research studies demonstrate the strong relationship between school success and early literacy exposure. Children who enter school with foundational literacy

skills will likely have success in formal schooling. Children's access to diverse literacy materials in the home encompass a range of resources that promote children's interactions with print. Literacy materials include children's access to print based materials such as books and magazines as well as access to a variety of writing and drawing materials that children can use to generate print. The influence of technology is also situated in this arena. Digital media offers children additional ways to interact with text and acquire literacy as they read, play, or otherwise explore words and sounds. Children's interactions across a variety of literacy materials supports their emerging knowledge about literacy practices.

Reading aloud has long been touted as an important practice to encourage literacy development. Educators and parents have long known the positive impact of sharing books with children. Positive interactions between children and caregivers that include picture book reading promote language skills and vocabulary development (Wells, 1985). Additionally, research suggests the way in which children are read to is related to their language gain. If children are given opportunities to be actively involved in the reading experience, for example, asking questions about the pictures, children show greater gains than when an adult simply reads the book (Whitehurst, et al., 1988). While this finding is valuable for educators to consider, the mere value of reading to a child should not be understated or undervalued. Providing children opportunities to engage with books in various ways and settings, including school settings, encourages positive feelings related to literacy.

Books offer children and families intentional and focused opportunities to share, discuss, and experience reading together. It is important to note the emotional connection that is facilitated by sharing a book with a child. This connection is valuable for development, but also for the pure joy of learning to love books and the experiences they

create. Books are also used to teach young children skills and to provide understanding of topics that may be difficult to discuss. Shared storybook reading provides an avenue for language learning, offering exposure to new concepts, ideas, and vocabulary that might not be encountered in everyday conversation. This learning occurs both through the text and the talk that is facilitated around the text by the caregiver and child (Brannon & Dauksas, 2014).

Sharing books is not the only way to support literacy development for young children. People use stories to learn about curricular concepts, share life experiences, and capture the imagination. Culture and history are, in part, transmitted through story. Storytelling is frequently described as an oral language activity, but the presence of gestures and physical expression are also an important part of storytelling. Moreover, storytelling can also take place through the use of signing, gestures, picture cards or props, and assistive technology. Storytelling is an important expression of symbolic thought as children or adults use language to convey information beyond the present moment or situation. Additionally, it allows children to gain insight into the world of communicating ideas to an audience. Children's response to stories is both social (Alexander & Levine, 2008) and cognitive (Lehne, et al, 2015). Speakers practice story concepts such as sequence and structure, dialogue, and vocabulary. Storytelling allows children to process emotions and find their voice.

Sharing books with children provides a strong literacy foundation

In addition to reading aloud, sharing books, and storytelling, families can also build strong literacy experiences through everyday conversations. Chapter two introduced the idea of "serve and return" and the five steps in facilitating serve and return interactions with young children. Engaging with children regularly using these steps is an integral component of supporting language development. Children successfully acquire language through consistent experiences and opportunities with adults they love and trust. When a young child babbles and an adult responds appropriately, connections are built and strengthened in the child's brain that support the development of communication. Much like a game of volleyball, the back and forth interaction is both rewarding and capacity building. Responsive caregivers provide an environment rich in serve and return experiences to build language and literacy knowledge and skills.

Our early literacy experiences influence how we think about children's home literacy environments. This includes previous experiences with family members, teachers, friends, and how our time and physical space were structured. Whether it is conscious or not, we are accessing our own memories. Did you have a family member who was a great storyteller at family gatherings? Did you have access to books? Were you read to? What was your own pathway to reading like? Our personal literacy journey is shaped by these early and formative experiences. Take a moment to consider the following questions: What were your personal home literacy experiences? How do you think these experiences supported your literacy development? How do your previous experiences impact your perception of what you believe families should provide to the children you are educating today?

4.3 Understanding Families' Diverse Social Contexts

Early childhood educators must recognize the

uniqueness of all cultures, languages, and communities by embracing the increasing cultural and linguistic diversity of our society. All classrooms should be seen as multicultural and inclusive, and promote equity by valuing and celebrating each family represented. This includes understanding the influence of multiple languages and dialects. These culturally responsive practices engage children and families through authentic home-school connections. As educators recognize and understand diverse social contexts, they are strengthening the effectiveness of instructional delivery. Academic progress takes place within the context of a child's ecosystems and their development is maximized when these ecosystems are considered and respected. Diversity of social contexts is an asset to educators, rather than a barrier to appropriate development, when culturally responsive practices are implemented in the classroom.

Language development is influenced by exposure and influence within a broader regional and social environment. When considering our nest model, this means not only the bird itself, and the nest, but also the tree and even the forest. This illustration illuminates the continual theme that language development is complex and influenced by many factors. Language experiences build a foundation of thinking and understanding upon which knowledge can grow. Educators strategically craft language experiences which draw upon the life experiences of students and add to their understanding of the world. Language experiences that connect to the broader regional and social environment bring life into the classroom and make what is learned at school relevant and real.

4.3a Multilingual Learners

Support of the family context may also mean challenging our assumptions about what it means to support a child's literacy. This is particularly true when it comes to

working with multilingual learners. Multilingual learners are young children who are learning to speak their home language as well as at least one other language during early childhood (Castro, Espinosa, & Paez, 2011) or before the age of five (McManis, 2012). This can happen simultaneously, such as having parents or other primary figures use two languages. It can also happen successively, such as when children are exposed to and speak only one language at home in the first one or two years and then are exposed to another language in an early learning program (Genesee, 2010). English language learners (ELLs) are children whose native language is not English and who become immersed in an English-speaking environment (Halle et al., 2012). This text uses the more inclusive term multilingual learners, as it acknowledges that children may speak more than just two languages.

As infants, multilingual learners may appear to be delayed in their language development. They may produce language later and exhibit smaller vocabularies in either language (Hammer et al., 2014). Children who are exposed to more than one language may enter early learning programs exhibiting lower English literacy skills than their monolingual peers, but they catch up and reach the same skills level as those same peers by the early grades (Hammer et al., 2014). If educators focus on these deficits, they might miss the significant advantages that multilingual learners experience. Ultimately, children who are multilingual learners will acquire proficiency in multiple languages through ongoing and intentional language experiences in their home, school, and community environments (Castro, 2013). In other words, there is a long-term gain for language development.

Aside from language development, the acquisition of multiple languages has other benefits that support cognitive development overall. Children who are multilingual may have advantages in their capacity for attention control while working on linguistic tasks and nonverbal tasks (Barac et al.,

2014). Access to working memory seems to also be enhanced, as well as a subsequent gain in executive function tasks such as planning, rule acquisition, and cognitive flexibility (Castro, 2013). It has also been suggested that bilingual children demonstrate heightened creativity and divergent thinking, probably because they are compelled to switch between two languages (Castro, 2013). Overall, there is evidence that exposure to multiple languages yields benefits for cognitive development that can be translated to other areas besides literacy.

Additionally, understanding multilingual learners requires understanding their home context. Blank (1998) suggests that children who speak more than one language might be more likely to live in homes with multiple relatives. Castro (2013) points out that while some may perceive living with multiple family members to be detrimental because of perceived crowded living situations, it is actually beneficial as children gain greater exposure to enriched language opportunities and cultural experiences. These rich opportunities to observe and participate in family language help to preserve and cement the dialogical skills that maintain it. Children who move away from using their home language to using English exclusively, tend to lose their ability to communicate in the first language and start to prefer English (Espinoza, 2013). This may depress academic achievement in English (Espinoza, 2013) and also may result in cultural loss as children lose the ability to communicate with extended family members who speak the home language.

Teachers can support families, even if they do not speak the home language, by encouraging families to continue to support the home language. A simple example of supporting multilingual learners and their home language would include making sure to pronounce a child's name correctly (Fenner & Snyder, 2021). Research suggests that there are multiple long-term benefits to promoting literacy skills in the child's home language, as well as English (Espinoza, 2013).

Below is a chart with suggestions for ways that teachers can support English Language Development and the home language.

Strategies for Supporting Literacy Development and Home Language

- Meet with families and gather important information about the child and family
- Add items to the classroom environment that represent the cultures, languages, and practices of the children
- Include books and materials that represent each family and culture in an authentic way
- Give the parents' opportunities to introduce key vocabulary words in the home language
- Read stories in the classroom that represent each family
- Use pictures, objects, and experiences to demonstrate the meaning of words and concepts
- Use visual cues, physical gestures, and signals

Adapted from: Espinoza, L. (2013). PreK-3rd: Challenging Common Myths about Dual Language Learners. An update to the Seminal 2008 Report. Foundation for Child Development Policy to Action Brief. No. 10.

Read the two vignettes provided below and consider the different stances the two early childhood educators illustrate.

Educator #1

Anika's brother regularly picks her up from school in the afternoon. On this particular day, Anika is eager to tell her brother all about the happenings of the day. She turns to him and speaking in Hindi says, "aaj hamane beej lagae aur yah bade phoolon mein vikasit hoga." (Today we planted seeds and they will grow into big flowers.) Ms. Osborne overhears the conversation and says to Anika's brother, "Anika really needs to be working on her English."

Educator #2

Hugo's dad requested to have a parent conference with Ms. Miller concerning Hugo's language development. Mr. Lopez is concerned that Hugo is not picking up English as quickly as he had hoped and he wants to know what to do. Ms. Miller explains that it is common to have a silent period while learning a new language and the child is learning to receive the language before producing it. Mr. Lopez suggests he will start speaking only English at home. Ms. Miller quickly responds and assures Mr. Lopez that he should continue to use the home language.

4.3b Multi-Dialectical Learners

Standard English includes the language patterns and usage of academic settings and published text. It has been codified in dictionaries, grammar and usage handbooks, and adapted by published English texts around the world (Biber et al, 1999). The usage of Standard English for written materials is relatively uniform. Spoken English, however, is less straightforward. Speech does not always exactly match what one would write on a page, particularly spontaneous speech used in informal settings. Additionally, there are important speech patterns that should be noted, including the use of dialects, which are rules-governed linguistic systems derived from another parent language, without achieving the socio-linguistic category of a language (Maldonado Garcia & Sandhu, 2015). Dialects are more complex than regional speech patterns or accents, yet are sometimes undervalued as significant, culturally bound practices. Persistent racial and classist biases work to marginalize and devalue the use of some dialectic speech patterns. Assumptions about dialects that are not considered to be mainstream or prestigious can be harmful (Luu, 2020). This text intentionally highlights African American English and Appalachian Englishes as examples of culturally significant dialects. It is important for educators to understand and affirm

dialectical speech patterns as they serve an important function for group membership and culture.

African American Vernacular English (AAVE) is a complex dialect of English that is used across the United States (Green, 2002). AAVE is sometimes also referred to as Black English, African American English, Black Vernacular English, Ebonics, African American Language or African American Regional Language. All of these terms refer to a variety of language patterns that include complex systems for phonology (sounds), morphology (word structure and relationship), syntax (sentence structure), and semantics (meaning). Some examples of AAVE speech patterns include (a) leaving out an auxiliary verb (copula absence), (b) third-person singular -s absence, and (c) invariant habitual use of the word "be" (Cukor-Avila & Balcazar, 2019). Leaving out an auxiliary verb would include statements such as, "He a football fan" or "She over there." Third-person singular absence denotes a missing "s" where it would be expected in standard English, such as in "I run. He run too." The usage of the "be" might include statements like "It be snowing!" or "I be playing." There is substantial variation in the usage and occurrence of these features, including generational and regional differences; and for some speakers of AAVE, they do not occur at all (Cukor-Avila & Balcazar, 2019).

The origins of AAVE are rooted in the fusion of Standard English and African linguistic forms (Easter, 2013) and hold important cultural meaning within groups where spoken (Labov, 2010). AAVE has complex rules and language features (Green, 2002). According to Laneheart, et. al, 2015), "When speakers use African American Languages, they know a system of sounds, word and sentence structure, meaning and structural organization of vocabulary items, and other linguistic and metalinguistic information about their language, such as pragmatic rules and the social function of African American Languages" (p. 3). AAVE is used by its speakers to

communicate,for social purposes, and even as a form of cultural capital (Spears, 2015). Moreover, AAVE phrases, features, and rules have been adopted into widely used, mainstream patterns of language. Luu (2020) suggests, "perhaps no other variety of speech has been quite so significant and influential to the development of standard American English" (para.11).

The term Appalachian Englishes is plural because there are different dialects, that evolved based on regions and migration patterns. Appalachian Englishes are dialects spoken in southern and mountain areas that include not only the Appalachian mountain range, but surrounding areas as well (Cramer, 2018). The histories of Appalachian Englishes are traced back to diverse groups of settlers to the mountains whose speech blended together over several centuries. Due to the relative isolation of mountainous areas, a distinct regional speech pattern, or dialect form, developed (Montgomery, 1989). These speech patterns are sometimes referred to as Mountain Talk, Southern Appalachian English, or Appalachian English. Like all dialects, Appalachian Englishes have complex grammatical features and linguistics, making them unique to other dialects. For example, the word *allow* is expanded to mean *think, say, or suppose* instead of the traditional meaning of *allow*. In context it might be used in this way, "He allowed he would get it done tomorrow." Another common feature of the language is to add the sound "a" before a verb. For example, "I've been a-studying for that lesson." Appalachian Englishes contain many other grammatical features and linguistics that make them unique; these are only a few. Like all languages and dialects, they have changed and evolved throughout generations. Unfortunately, there are negative stereotypes that surround the Appalachian Englishes. Dialects and vernaculars have complex grammatical features. The usage of Appalachian Englishes and other dialects is not an indicator of a lack of education, but rather demonstrates the usage of language in

a way that denotes group membership, cultural identity, and the innovation of the people of the Appalachian region (Montgomery, 2004). As educators, we are charged with providing the optimal experience to foster growth and development. We certainly must use instructional and assessment practices that are linguistically and culturally responsive (Castro, 2011). Multilingual learners are acquiring linguistic and cultural gains. By maintaining a strengths-based perspective as we interact with families who speak languages other than English, we will best support the child and family.

Speakers of AAVE and Appalachian Englishes are often able to code-switch, meaning that they use AAVE or Appalachian Englishes in some settings and Standard American English in other contexts (Easter, 2013). Code-switching is common among speakers of English that also use dialects or vernaculars. Children are able to modify their language use as the circumstances require, and they learn to code-switch or style-switch by the age of nine (Snell, 2015). It is profoundly important for educators to be supportive of children's use of languages and dialects as they serve as important cultural markers and signify group membership for users.

Pause and Consider: I Saw a Bear!

Jack entered his preschool classroom ready to tell his teacher, Mrs. Mullins, all about his weekend adventures. He entered the classroom and approached Mrs. Mullins, while shouting, "Mrs. Mullins, Mrs. Mullins, you will never believe where my granddad took me

yesterday....we went way up our 'holler' into the woods and I saw a real live bear!" Mrs. Mullins could not help but notice his sheer joy and excitement. The class had studied bears the previous week and determined which kind of bears lived in their mountains. A teacher from outside of the region might have corrected Jack's pronunciation of the word 'hollow' as 'holler,' but Mrs. Mullins focused on the meaning of Jack's communication. She asked questions about the color and size of the bear, and what his grandmom had to say about this excursion. She made a mental note to talk with the children about the pronunciation of the word hollow when they learn their home addresses later on in the year. Mrs. Mullins knows this is a common word usage in the southern Appalachian region and she values the strong culture and accompanying vernacular structure of the language. She knows that children will be exposed to other language models through media, instructional materials, and her own language modeling. Mrs. Mullins knows that she will expose her students to more widely used word pronunciations, but in a way that does not detract from the contextual value by making a child feel ashamed or embarrassed. She knows it is important to preserve terms, usages, and pronunciations that are part of shared vernacular structures, as these serve important cultural functions.

Can you think of a time when you encountered a situation that allowed you to supportively affirm a child's home language or dialect?

4.4 Working with Families to Promote Literacy

As described in Chapter 2, Bronfenbrenner's model demonstrates the strong influence and implications of a child's family and home environment. This is especially true when considering literacy development for young children. Early childhood educators have the opportunity to build relationships with families, support families, and engage families in their child's early childhood experience.

Building trusting relationships with families happens over time and through a series of positive interactions. Trust, empathy, and time are necessary components of building positive relationships. When educators work to get to know families personally, culturally relevant and powerful funds of knowledge are revealed and can be used to enhance children's literacy experiences. For example, an educator may discover in conversations with the family that a child frequently cooks with her grandmother and enjoys measuring ingredients and following the recipe. The grandmother reads the recipe and asks guiding prompts like, "Okay, let's see what's next." This small insight into the child's literacy experience allows the educator to draw the child into meaningful conversations, play experiences, and cooking experiences that build on the procedural literacy knowledge the child already knows about how recipes "work."

4.4a Addressing Vulnerability

Some children from vulnerable communities are less prepared for the academic language tasks of school (Rivalland, 2004). Research often associates low socio-economic status with poor school achievement, including literacy abilities (Garrett-Peters et al., 2016).

Children from vulnerable communities might need additional scaffolding to bridge their home literacy experiences to expected school literacy outcomes. Poverty can create stress for young children and their families. Conditions such as food insecurity, unemployment, community violence, and inconsistent access to healthcare can impact one's capacity for attentive parenting (Manz et al., 2010). These variables potentially affect the health and well-being of the family and (the or a) parent's ability to consistently provide enriching language opportunities. However, it is negligent to say that living in poverty equates to poorer academic outcomes. Parents who interact sensitively with their children positively impact language development (Raviv et al., 2004). Additionally, access to high-quality early learning experiences with strong family/educator relationships supports literacy development for this vulnerable population. Adults in early care settings nurture a child's language development by engaging in verbally stimulating interactions (NICHD Early Care Network, 2000).

When a child's early experiences with language are limited, educators may need to develop intentional interventions to mitigate literacy gaps that, if left unattended, might result in negative academic outcomes for the child in the future. Success in educational environments is connected to strong language and literacy in the early years (Hirsch-Pasek et al., 2015; Hoff, 2013; Huntsinger, Jose, & Luo, 2016).

For children who have not participated in rich language experiences, there are long-term implications related

to language competency and overall school readiness (Merritt & Klein, 2015). For example, parents who are engaging in abusive or neglectful behaviors tend to speak less frequently to their children and do not draw out conversations (Christopholous et al., 1988; Eigsti & Ciccheti, 2004). This might result in a longer lead time for children to feel comfortable or competent in expressing themselves. Linguistic deprivation may also occur with children who are hearing-impaired and do not have adequate supports, and who lack access to methods of communication (Humphries et al., 2012). Deprivation of language creates other learning problems as children might not follow typical developmental trajectories in other areas, such as mathematical reasoning (Humphries et al., 2012) and memory tasks (Newport, 1990). Any hindrance to a child's ability to communicate impacts the child's literacy development.

More recently, the influence of technology has broadened the definition of the literacy environment and further diversified children's literacy experiences. During the COVID-19 pandemic of 2020, this diversification became keenly apparent. The 2020 pandemic demonstrated how access to technology and use of technology influences the ability of children to acquire literacy concepts within virtual settings. Some teachers held synchronous video-conference sessions, reading a story to the students in their classroom. Certainly, a familiar face reading a story fosters a social connection, provides a forum for discussing books, and creates an opportunity for developing children's literacy. Yet, accessibility to the literacy experience for children was not equitable. Some children may not have had the opportunity to participate in the synchronous sessions with their classmates and viewed recordings of the read aloud experience. Other students might not have access to an appropriate device or wifi. A family's economic capacity to mitigate and successfully utilize technology varied greatly, and resulted in uneven access to educational opportunities throughout the pandemic. For

example, some students may have access to a device, but might be sharing this access with siblings or other family members who also need them. Parents might be able to allow a child to use their cell phone for a portion of the day, but few adults can navigate a whole day without access to their own cell phone. The younger the age of the child, the less likely they might be to have access to their own device.

Even when children had full access to technological resources, the impact of Covid-19 greatly diminished children's opportunities to develop their literacy understandings in collaboration with their peers in play-based spaces. While read-alouds can be done via video-conference, hands-on literacy activities cannot. In-person school contexts allow early educators to extend read alouds with sensory rich literacy activities to support literacy development; these same experiences are not readily transferable to online platforms. In attempts to replicate the sensory experience at home, educators sent families recipes to make playdough at home. However, a solitary literacy activity is not the same as a social literacy activity. In this particular example, educators' efforts were further thwarted, as there was a flour shortage during the pandemic, making a key ingredient for playdough inaccessible. This brief discussion of some of the inequities experienced by families living through the pandemic provides an example of how the use of technology can certainly be a contributor to literacy development. But, it also provides an important illustration of how context is individual and connected to the people and materials a child has access to.

As early childhood educators interact with families, they have the opportunity to make profound impacts. Children and families might have past experiences or current situations that complicate development; the educator has the opportunity to partner with the family and work towards a successful future. In order for the child to reach their optimal development, they need strong social relationships and

interactions that enhance their emotional well-being. This in turn, prepares the child to grow cognitively, and enhances language development. Families benefit from community support as they engage in these tasks. Positive and consistent interactions with their child's teacher provide an avenue of support for families. In this way, early learning settings play a vital role as community assets and resources to the family; and, they have a direct impact on children. As a greater goal, early childhood programs should work to build adult capabilities and strengthen families as they support the needs of their children.

4.4b Strategies for Promoting Diversity and Equity in Language Learning

Working with families is an integral part of being a quality early childhood educator. The profession requires us to approach families in an unbiased manner. It is important to understand what a bias is and our own "lens" or perspective from which we make decisions and draw conclusions. Implicit bias refers to unconscious attitudes, reactions, stereotypes, and categories that affect behavior and understanding (Chin, 2020). Some examples of implicit bias that might be relevant to language and literacy are the teacher discounting the language used in the home environment or the expectation to make eye contact when speaking. Both of these examples are a result of cultural bias and are sometimes prevalent in early childhood classrooms. No one is immune from a bias; however, as a professional, there are many resources available for exploring possible bias.

Being aware of our own biases can ensure that we approach all families from a strengths-based posture and restrain from judging situations and environments that are different from our own experiences. This is an important first step in creating a climate that promotes equity and diversity.

Further work should always center on continually seeking to understand how others are different and valuing differences as they relate to supporting language and literacy development. The key to promoting equity and diversity in early childhood spaces is to appreciate and respect children's home languages, cultures, and traditions. See the figure below for additional strategies to support families.

Strategies to Ensure Linguistic and Cultural Diversity

- Involve families in your classroom
- Educate families on the benefits of mastering more than one language
- Honor family's values and norms
- Assist families to ensure children stay connected to their home language
- Support the home language
- Provide children with many ways to demonstrate mastered skills

Key Take-Aways

Early childhood educators have an integral role to play in recognizing and celebrating the value in

children's home contexts when making intentional decisions, while being sure to capitalize on the strengths for each child and family. In recommending the integration of a culturally responsive stance, we return to Gay's (2010) definition which explains that when students' cultural knowledge, prior experiences, frames of reference, and performance styles influence our everyday instructional practices and the selection of learning materials, we are responding more effectively to learners' needs.

Supporting families in a strength-based and culturally sensitive way is critical for creating an inclusive classroom environment and building strength-based relationships with families. The role of the family in a child's language and literacy development is critical and individual. Early childhood educators have the opportunity to build relationships with families, and partner with them, to recognize the influential role they already play in developing their children's literacy expressions. Celebrating the individuality of families allows educators to leverage equitable practices and nurtures each child's unique linguistic pathway. It is imperative that we understand the diversity of families and work to build on their strengths, while being aware of our own perspectives and implicit biases. The bird in the nest model cannot survive without the support of the nest in the tree. This illustrates the vital role of families in young children's language and literacy development.

Appalachian Englishes in the 21st Century: https://www.linguisticsociety.org/resource/appalachian-englishes-21st-century

Becoming Upended: Teaching and Learning about Race and Racism in the Early Childhood Classroom: https://www.naeyc.org/resources/pubs/yc/may2018/teaching-learning-race-and-racism

Black English Matters: https://daily.jstor.org/black-english-matters/

Building Adult Capacities to Improve Child Outcomes: (https://developingchild.harvard.edu/resources/building-adult-capabilities-to-improve-child-outcomes-a-theory-of-change/)

Colorín Colorado: https://www.cal.org/

The Dialect of the Appalachian People: http://www.wvculture.org/history/journal_wvh/wvh30-2.html

Ebonic Need Not Be English: https://www.jstor.org/stable/43025634?mag=black-english-matters&seq=1#metadata_info_tab_contents

Funds of KnowledgeSurvey: https://earlyeducatorsupport.uncc.edu/sites/earlyeducatorsupport.uncc.edu/files/media/Funds%20of%20Knowledge.pdf

Funds of Knowledge: https://eclkc.ohs.acf.hhs.gov/video/funds-knowledge-video

Implicit Bias: https://implicit.harvard.edu/implicit/takeatest.html

Strategies to Ensure Linguistic and Cultural Diversity: https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/diversity.pdf

Multilingualism: https://www.zerotothree.org/resources/2095-multilingualism

National Association for Education of Young Children (NAEYC) Equity Resources: https://www.naeyc.org/equity/resources

National Association for Education of Young Children (NAEYC) Advancing Equity in Early Childhood Education Position Statement: https://www.naeyc.org/resources/position-statements/equity

Teacher Tips: Storytelling: https://www.scholastic.com/teachers/articles/teaching-content/teacher-tips-storytelling/

Virginia's Early Learning & Development Standards (ELDS): Birth-Five Learning Guidelines. https://www.doe.virginia.gov/early-childhood/curriculum/va-elds-birth-5.pdf

What is Ebonics (African American English)? https://www.linguisticsociety.org/content/what-ebonics-african-american-english

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Image Credits

5. Building the Environment for Play-Based Learning

"When we observe the behaviors of people we notice that what they do is markedly influenced by where they are."

Kounin & Sherman, 1979, p. 145

Opening Vignette: Prashant's Naan

Four-year-old Prashant pulls a class recipe book from a shelf in the kitchen area that has a couple of recipe boxes, spice jars, and other photo and print-rich recipe books for the children to use. Recently, Prashant shared his family's recipe for making naan, an Indian flatbread, with his class. Today, he uses the class recipe book to begin his play in the home environment center. He carries the recipe book to the stove singing to himself, "Naan, naan, naan." He sifts through the pages of recipes with pictures of his friends enjoying their

favorite foods until he finds the recipe he is looking for. On his recipe page, Prashant included a hand drawing of his family eating naan together at home. Pointing to text at the top left he says, "First, I have to put in flour." He pauses reading to dip a measuring cup into a canister with a picture of wheat and the word "flour" taped to the outside. He gestures, dumping two scoops of flour into a bowl on the counter. He returns to the book and reads, "Then, I have to put in the water." Prashant reaches for an empty pitcher and pours water into the bowl. Prashant reads again from the book and adds "yogurt" to the bowl. He picks up a spoon and begins stirring the ingredients in the pot. Then, Prashant scoops the mix into a pan on the stove singing, "Cook, cook, cook."

Prashant pulls naan from the stove top and places the pan on the table. Prashant reaches into a small block basket on the shelf and puts blocks on the tray. Taking the tray to the table he calls out, "Naan for sale, come have a piece of naan!" Desmond, a 4 ½ year old, hears Prashant's invitation and sits down at the table near the kitchen area. Desmond says, "I would like to buy a piece of naan. What kind of naan do you have?"

Miss Elise, the instructional assistant who was documenting Prashant's play episode nearby, joins in the play prompting, "Oh, I think your customer might need a menu to help him decide what kind of naan he would like to order." Taking Miss Elise's suggestion, Prashant picks up a clipboard hanging on a hook next to the table and a marker and begins to write three strings of letter-like symbols across the page. As

Prashant writes, Desmond says, "I hope he has the butter kind." Prashant hands the clipboard to Desmond and says, "We have garlic and plain naan with butter. What kind would you like?"

Miss Elise moves on to observe other children in the class as the two boys continue to enact Prashant's play episode making naan.

5.1 Introduction

Throughout this text, we use the nest as an analogy for reflecting on the multitude of factors that support a child's emerging literacy skills. Reflecting on this analogy, we recognize each nest is influenced by the larger ecosystem in which it is constructed. Diverse species of eagles, owls, pigeons, and penguins thrive in uniquely different habitats and use the available natural resources to build viable shelters. Similarly, early childhood educators work in diverse and complex learning environments. Early education contexts include (but are not limited to) early intervention settings that occur with young children and families in the home, early care centers serving children and families from birth through age five, and Early Head Start and Head Start programs located within public and private schools. The physical spaces early educators and children occupy greatly influence their interactions, behaviors, and collective literacy experiences. Referred to as the *ecology of the classroom* (Reutzel & Jones, 2013) each early learning context is as richly varied as the birds' environmental habitats noted above. Early educators play a central role in strategically drawing upon and enriching each learning

context to promote young children's literacy development and engagement.

Intentionally designed environments encourage children to experiment with a variety of materials, prompt rich dialogs between children and educators, and challenge children to use their emerging oral language, reading, and writing skills for a variety of purposes. Classroom environments need to be strategically arranged to increase the likelihood that rich literacy interactions will occur. Consider the exchange between Prashant, Desmond, and Ms. Elise in the vignette at the beginning of this chapter. The class recipe book, labeled cooking containers, writing materials, and language exchanges worked in complementary ways to inspire and extend the literacy rich play opportunity. When early educators pause to identify the environmental factors influencing particular learning contexts, opportunities for enriching young children's literacy spaces are revealed. This chapter prepares educators to intentionally construct classroom environments to enhance children's emerging literacies. This chapter will explore the following questions:

How do early learning environments influence children's emergent literacy experiences?

How do educators use constructivist, sociocultural, and ecological perspectives to shape literacy rich play experiences?

How do educators intentionally design and

evaluate rich literacy environments to enhance children's literacy experiences?

5.2 Emergent Literacy Environments

Effective early learning environments consistently provide opportunities for young children to use emerging literacy skills and understandings in personally relevant ways. To orchestrate meaningful literacy environments, educators make strategic decisions about the people, materials, and experiences available to children. Children's interactions with the people and objects in their physical environment influences their cognitive development (Reutzel & Jones, 2010). Educators draw on ecological and sociocultural perspectives when reflecting on how specific features of the learning environment affect children's engagement in a variety of literacy events. When combined with constructivist perspectives, ecological, and sociocultural perspectives (see Chapter 3 for more on educational theories) provide useful lenses for analyzing the instructional environments educators create to enhance children's literacy.

Early childhood classrooms are common environmental contexts. By this we mean that most people, especially early educators, can easily describe characteristics commonly found in classrooms designed with young children in mind (e.g., colorful charts, small tables, low bookshelves, art easels, water tables, library nooks, dramatic play centers, and

construction spaces). Identifying the physical areas and materials in early learning contexts is an important first step in learning how to effectively orchestrate meaningful emergent literacy contexts. When educators consider different learning spaces for young children, they also envision children using the space to engage in different activities. Understanding *the ecology of a classroom* challenges educators to consider how the *space* itself influences the types of activities children and teachers engage in *because* they inhabit a particular space, at a particular time, with specific people. We use the word *challenge* above to emphasize that learning to see how materials, classroom design, and children's interactions shape literacy opportunities is not necessarily an easy task. This is because the "patterns, structure, and organization of activities in the classroom environments are often invisible to the mind's eye but are essential elements of designing effective classroom learning environments" (Reutzel & Jones, 2013, p. 83). Intentionally focusing on how educators and children use spaces and materials to engage in a variety of literacy expressions makes invisible patterns visible.

Children learn by interacting with environment materials such as letter stencils and sticks.

As early educators we may take for granted the basic premise that a child's learning environment influences their cognitive development. At the same time, we may also surmise that designing emergent literacy environments may require practice as we learn to notice the people, materials, and activities occurring in a given space with the intention of extending and enhancing children's literacy enactments. Fortunately, we have a significant amount of research demonstrating that educators' intentional efforts designing literacy-rich learning spaces and facilitating literacy-rich play experiences promote children's emergent literacy practices.

5.2a Research Examining Emergent Literacy Environments

Studies exploring children's interactions with materials

and teachers inform contemporary classroom design practices and provide research evidence for the intentional structuring of centers to challenge and engage children in meaningful literacy experiences. Early research capturing human behavior in authentic contexts leads educators to wonder how classroom environments sustain children's interests and influence their behaviors (Barker, 1968; Roskos & Neuman, 2002). Children self-select certain play areas with more frequency than others. Some children may choose blocks routinely, while others seek out dramatic play. Additionally, different play areas sustain children's engagement longer than others. For example, research shows block centers and art stations tended to be more popular with preschool children than other center opportunities. For instance, the art center has more "holding power" for children than other centers (Weinstein, 1979). Educators repeatedly shift their attention to meet specific environmental demands (e.g. art commands more attention from educators than the reading corner). Finally, the complexity of children's social interactions also vary by center (e.g., children's interactions with dolls demanded more complicated exchanges to sustain play scenarios) (Weinstein, 1979).

In early childhood contexts, centers offer small learning environments for children to exercise their emerging literacy skills. Centers, also called learning stations, should be strategically redesigned and enhanced to entice children's spontaneous literacy enactments (Roskos & Neuman, 2002). The design of centers should be intentional. For example, children interact more frequently with books when the classroom library displays books with the cover facing out instead of shelving books with only the bound spine exposed (Roskos & Neuman, 2002). As a result, early childhood classrooms frequently use front facing bookshelves or put books in bins with the covers facing forward to entice children to read. Similarly, literacy play props (e.g., note pads, writing

tools, envelopes) encourage children's explorations with print and support children's emergent writing skills (Souto-Manning & Martell, 2016).

Early learning settings use essential design elements to organize the physical space. Roskos & Neuman (2002) encourage educators to use hard and soft boundary markers (e.g., low shelving and carpeting) to organize physical spaces and guide children's play within each area. Defined areas organize spaces visually for children and encourage them to use easily accessible materials as a part of their play. Accordingly, educators should enrich play areas with appropriate, relevant, and authentic literacy materials. Intentional literacy materials will influence play complexity and invite children to use literacy rich materials for a variety of play purposes. Extended time engaged in purposeful play scenarios allows children "to move from exploratory play to mastery of concepts" (Roskos & Neuman, 2002, p. 285). Children's literacy knowledge develops when they have time to experiment with the literacy props in their play environments. Children's literacy environments have the greatest impact when educators provide time for children to engage with meaningful literacy spaces, materials, and activities.

5.2b Linking Theory to Research and Practice

Ecological and sociocultural theories provide rich theoretical perspectives for educators to use when designing effective literacy play-spaces for children. In fact, when educators pause to consider the physical and human factors influencing a particular environment, they begin to notice children's patterns of behavior and anticipate opportunities for scaffolding children's attention and engagement. *The Ecology of an Early Childhood Literacy Classroom*, presented in Figure 5.1, illustrates how educators might think about the contextual factors influencing their emergent literacy environments.

Based on a study conducted by Cambourne (2002), the model situates *people*, *materials*, and *routines* as the interrelated and interdependent characteristics shaping literacy environments. The round dots that permeate the environmental characteristics represent the intentional literacy experiences educators create to scaffold children's literacy acts.

Figure 5.1 Ecology of the Early Childhood Literacy Classroom

ECOLOGY OF THE EARLY CHILDHOOD LITERACY CLASSROOM

- Children
- Early Educators
- Family Members

People

- Books
- Writing Materials
- Wall Art
- Puppets

Materials

Routines

Literacy experiences are the learning opportunities that permeate the early childhood environment. Educators leverage the people, materials, and routines to design learning experiences that promote, extend, and enhance children's literacy engagement.

- Circle Time
- Program Curricula
- Children Sign-In

The *Ecology of an Early Childhood Literacy Classroom* model invites educators to ask intentional questions about the classroom environment. When educators pause to consider *when*, *where*, with *what,* and with *whom* literacy experiences might occur, they can intentionally change the environment to make the literacy experiences more powerful. Educators exercise the greatest power in the classroom and this allows them to orchestrate the environment "to create the kind of learning culture they desire" (Cambourne, 2002, p. 359). As decision makers, educators determine how the people,

materials, and routines will interact to support children's emerging literacies. In fact, many of the literacy experiences educators create become part of children's regular routines. This helps children engage in literacy practices in predictable ways (e.g., finding their name card and putting it under their picture as the attendance routine).

Children practice literacy in many ways, such as by tracing stick letters with a paint brush.

The *Ecology of an Early Childhood Literacy Classroom* model invites educators to consider how they might manipulate the materials, people, and routines to work together in a variety of ways to enrich children's literacy experiences. Educators frequently use a circle time, or group time, as an opportunity to bring children together for a whole group activity. For example, it is common to do the daily calendar, weather, and a welcome song in a circle time as part of the morning meeting. As such, circle time is a common *routine* for preschool children, books are prevalent *materials*, and several children (*people*) usually participate in circle time

together. Consider how children's language and literacy interactions might shift if the educator ended every circle time with a paired buddy "reading." In this example, we can predict the regular opportunity to share a book with a friend allows children frequent and predictable opportunities to practice actions associated with reading. In this shared literacy space, children will practice a number of reading strategies and skills including talking about books, turning pages, examining illustrations, making predictions, making personal connections, expressing opinions, and learning new vocabulary. Introducing the "buddy reading" routine to the children will require some scaffolding on the part of the educator and will be determined by the children's needs, ages, and previous experiences sharing books. Once the routine is established, the educator can begin to strategically enhance children's "buddy reading" time by introducing new reading concepts and skills in circle and challenging them to find or do something similar with their buddy.

The following box provides another example of how the ecology of the early childhood literacy classroom may be used to enhance children's literacy opportunities in diverse spaces.

Lunch Time: A Time for Intentional Literacy Routines

Lunch time is arguably a hectic period of the day for educators and children. Educators are concerned with supporting children throughout the community experience and need to attend to the hand-washing, eating, milk pouring, and clean-up routines. Within this context, opportunities for

enhancing children's literacy may become invisible as educators strive to stay on schedule. However, an analysis of the lunch time routine reveals opportunities for embedding simple environmental prompts to guide children's intentional use of language, writing, and reading.

Table 5.1

Instructional Moment	Literacy Material	Literacy Routine
Choosing Lunch Items	Provide laminated menus with frequent lunch choices

fruit choices

vegetable choices

drink choices

entree items | Educators and children can use the menu to talk about the lunch selections. The visual cue of the menu prompts the literacy experience and encourages children to "read" their choices and communicate their preferences. |
| Lunchtime Helper Routines | Velcro charts with picture symbols and labels for the lunchtime helper jobs children (i.e., napkin helper, sweeper, menu collector, etc.)

Children's name cards with photos as needed | Children work with educators to select a helper job for the day. The routine encourages children to identify their own name card and place it under the helper job for the day. As children's writing develops they are invited to write their name next to a job instead. |

Using the Ecology of an Early Childhood Literacy Classroom model, the people influencing the

literacy opportunity include the children and the educator, the illustrated menus and helper charts are the materials extending children's literacy engagement, and the children's selection of specific lunch items and jobs become the enacted literacy routines.

Finally, it is important for educators to value their capacities for flexibly responding to shifting classroom contexts. We know an early childhood classroom is anything but static; it changes constantly. Roskos and Neuman (2011) remind us, "At one point or another (and at every turn), teachers confront *what is* and *is not* possible in the classroom environment they inhabit with their students" (p. 110). Learning to identify, evaluate, and modify classroom learning spaces will enhance the early childhood literacy classroom environments you create and increase opportunities for you to intentionally nurture young children's literacy understandings.

5.3 Using Theories of Play to Orchestrate Intentional Literacy Learning Opportunities

The first part of this chapter discussed how people, materials, and routines/activities shape early childhood classroom environments. The intentional literacy learning

opportunities that "float" on top of these ecological dimensions influence children's emergent literacy practices. In the second part of the chapter, we will focus on how early childhood educators use constructivist and sociocultural play theories, alongside ecological perspectives to prepare, manipulate, and enhance young children's literacy environments.

Play remains an essential element of the early childhood classroom context. It is through a child's intentional exploration and engagement in the world around them that they gain important understandings about their communities and build agency as literate members. Saracho and Spodek (2006) explain, "Play experiences provide young children with opportunities for them to use language in literate ways and to use literacy as they see it practiced" (p. 708). Accordingly, during play children reenact stories, simple and complex lived experiences (like going to the store and cooking) and even favorite movie or television storylines; in doing so they use language, reading practices, and writing practices to drive play scenarios forward. Early educators use constructivist and sociocultural perspectives, alongside the ecological perspectives explored in the first part of this chapter, to design relevant and engaging literacy environments for young children to support play experiences. As we will discover, the three theoretical perspectives are not mutually exclusive, rather their philosophical principles work in complementary ways to support educators' facilitations of play-based literacy environments.

5.3a Constructivism and Literacy Play

Figure 5.2 Constructivist Perspectives

Constructivist perspectives emphasize changes in a child's internal literacy understandings.

As discussed in Chapter 3, constructivist perspectives recognize children gain important insights about how the world works when they are engaged in rich play experiences. Play supports children's literacy understandings through a process of construction, during which children are acting on the world based on their existing understandings or *schemes* (Rosko et al., 2010). Framed as a stage theory, constructivist perspectives reason children progressively acquire more sophisticated logic patterns as they interact with their environment. As children develop they use memory to engage with their environment in increasingly sophisticated ways.

Play opens important spaces for children to practice emerging understandings about the world (Roskos et al., 2010). During play children use *object substitution* and *meta-play talk* to reenact and reimagine observed events from their own lives. Review the excerpt from the running record captured by Elise, the early childhood educator, who observed Prashant making the naan to see how children reenact literate experiences in their pretend play.

Figure 5.3 Running Record of Prashant's Naan (1)

Date: *4/18/2020*

Student: *Prashant*   **Center:** *Home Living*   **Time:** *9:42 – 9:47*

Prashant carries the recipe book to the stove singing to himself, "Naan, naan, naan." He sifts through the pages of recipes with pictures of his friends enjoying their favorite foods until he finds the recipe he is looking for. On his recipe page, Prashant included a hand drawing of his family eating naan together at home. Pointing to text at the top left he says, "First, I have to put in flour." [...] He picks up a spoon and begins stirring the ingredients in the pot. Then, Prashant scoops the mix into a pan on the stove singing, "Cook, cook, cook." Prashant pulls naan from the stove top and places the pan on the table. He reaches into a small block basket on the shelf and puts several rainbow blocks on a tray. Taking the platter to the table he calls out, "Naan for sale, come have a piece of naan!" [...]

In Prashant's case, both object substitution and meta-play talk promote his exploration of important literacy skills. Renaming objects (e.g. "nann" instead of "blocks") and offering running narrations (e.g. "Naan, naan, naan" and "cook, cook, cook") bring to life pretend play scenarios, making them "real." Using other objects to represent items not readily accessible is

considered an important first step toward understanding that letters are symbolic representations of oral language. Similarly, meta-play talk provides ongoing narration of children's actions and propels storylines forward. Indeed, young children frequently narrate and negotiate their play, even when playing independently. Through their oral narrations, children negotiate literacy enriched spaces and use environmental tools to represent their understandings about how the world works.

Additionally, in Prashant's Naan play scenario, we see examples of how dramatic play affords children opportunities to explore concepts of sequencing, to practice procedural activities, and to recognize text as informative resources. We also see Prashant practicing important language skills such as vocabulary usage, word order, gesturing, and soliciting conversational partners. Prashant strengthens his cognitive skills and practices using his prior knowledge in play. The exact sequence of events for making a naan and the ingredients may be creatively imagined, but it is hard to overlook that Prashant's focused and intentional reenactments mirror common kitchen and literacy practices. Pretend play opportunities reinforce children's current conceptualizations regarding how and why people use language and support their emerging literacy skills.

5.3b Sociocultural Perspectives and Literacy Play

Figure 5.4 Sociocultural Perspectives

Sociocultural perspectives emphasize learning is grounded in children's intentional interactions with other learners, educators, and materials.

Sociocultural perspectives also recognize innovative play exchanges promote children's emerging literacies. When children play, they use language, gestures, and materials in their environment to sustain play narratives. Play intentions and goals inspire meaningful actions and children embrace flexible representation of objects to drive their play narratives forward (Roskos et al., 2010). For example, Prashant approached his play session with the intention to make bread. He accessed materials to represent real-world items and used language to reenact the preparation process and later sale of the naan.

Play provides a setting for children to use their creative thinking and to communicate their thoughts. Accordingly, sociocultural perspectives encourage educators to consider how children's interactions with objects and more experienced people, including peers, educators, and parents, promote cognitive development (Roskos et al., 2010). *Thought* and *meaning* support children's *interactions* with playmates and objects to nurture literacy development. Prashant's thoughts on making the naan and the meaning of the item he was producing (it should be made and then shared), supported opportunities for Prashant to interact with his classmates.

Vygotskian perspectives consider play "a strong social 'push' from the outside" compelling children to develop more sophisticated interpretations of how their world works (Roskos et al., 2010, p. 71). It is within complex sociocultural exchanges that children's narrative expressions develop and how changes in children's understandings occur (Nicolopoulou, 2005).

Let's return to Elise's running record capturing Prashant's play episode making naan to understand how children's literacy development is also nurtured via their direct interactions with people in their environment.

Figure 5.5 Running Record of Prashant's Naan (2)

Date: *4/18/2020*

Student(s): *Prashant + Desmond*   **Center:** *Home Living*   **Time:** *9:42 – 9:47*

[...] Prashant pulls the naan from the stove top and calls out, "Naan for sale, come have a piece of naan!" Desmond hears Prashant's invitation and sits down at the table near the kitchen area. Desmond says, "I would like to buy a piece of naan. What kind of naan do you have?"

End memo

In this case, Prashant expresses his desire to continue his pretend play narrative by eliciting the support of a peer. Enlisting the play of others into the cooking episode will require the two children to work together to nurture the narrative forward. As their play scenario develops, the children

will adhere to specific rules to ensure the meaning of their play is maintained. In this manner, pretend play helps children develop an understanding of different points of view. Miss Elise, the educator, takes advantage of the shifting storyline negotiated between Prashant and Desmond to draw the children's attention to another kind of text people frequently use in restaurants to help them make decisions, a menu. The educator's casual language prompt provides an intentional literacy scaffold to extend the narrative for the children and supports "meaning-oriented thinking" (Roskos et al. 2010, p. 71).

5.3c Ecological Perspectives and Literacy Play

Figure 5.6 Ecological Perspectives

Ecological perspectives emphasize learning is influenced by the opportunities available to children in their environment.

Constructivist perspectives focus on the child's internal mental constructs, and sociocultural perspectives emphasize the interactional exchanges that enhance a child's understandings; however, ecological perspectives highlight the role the environment plays in drawing a child into literacy. Literacy-rich play environments allow children to explore

"literate ways of thinking" with their peers and use their emergent literacy skills to influence evolving play scenes (Saracho & Spodek, p. 711). Dramatic play opportunities encourage children to recreate life experiences and provide meaningful spaces for children to manipulate literacy materials (e.g., books and writing tools) and grapple with foundational skills that promote children's literacy (Saracho & Spodek, 2006).

In "Prashant's Naan" play scenario, his incorporation of diverse literacy practices (i.e., reading a recipe and creating a menu) is not surprising when we use ecological perspectives to consider the design of this literacy-rich classroom. Both Prashant and Desmond utilized their environment and their understandings of how people interact in different contexts to support their play narrative. We can readily identify the *routines* (i.e., center time that opened spaces for pretend play and children's existing schemas of restaurant and cooking rules), *materials* (i.e., books, cooking utensils and kitchen supplies, paper and markers) and *people* (i.e., the children and the educator) that collectively influenced the children's efforts. Educators can positively enhance children's literacy understandings when they intentionally analyze the environment for opportunities that promote children's routine interactions with print-rich materials and language-rich experiences.

As important *people* in the child's learning environment, early childhood educators should seek opportunities to scaffold children's expressions and enactments during dramatic play experiences (Morrow et al., 2013). In Prashant's play scenario, the educator's decision to encourage children to bring in a recipe, share it with the class, classify the food by category, and add it to a class recipe book throughout the year established an instructional literacy *routine* that became a natural part of the children's classroom environment. This particular literacy experience allowed the educator to add an additional print rich *material* (i.e., the class

recipe book) to the kitchen environment. In this case, the educator recognized the class recipe book would be especially appealing to her learners because it held family and cultural relevance. Experiences like this that strategically blend children's home and school environments further support children's literacy development and illustrate how ecological perspectives can be used to highlight the rich literacy practices already supporting children's understandings in their home environments.

Figure 5.7 Developmental Theories

In complementary ways, constructivist, sociocultural, and ecological perspectives invite educators to think

strategically about play-filled literacy environments. The perspectives do not need to be considered as competing frameworks, rather each perspective can be used intentionally to consider how we can manipulate the environment to enhance children's experiences using their oral language, reading, and writing skills. In the following section, we focus on principles and practices educators use to intentionally orchestrate literacy-rich classroom environments for children that are developmentally and contextually relevant.

5.4 Designing Literacy-Rich Play Environments

Optimal learning environments are designed with intentionality. When considering how to orchestrate effective literacy-rich environments for young children, educators strategically reflect on how the physical environment invites children to actively use language in personally relevant ways. The principles of *universal design* guide educators' decisions about how to establish literacy routines that support all learners within a particular learning environment. Originally, architects used the concept of universal design to ensure people with diverse interests, abilities, and needs were able to successfully navigate a particular space with ease (e.g., curb cuts, flexible seating, wide pathways, and automated doors and lights). Educators use concepts of universal design to ensure all children are able to meaningfully take part in and access the learning environment (Dinnebee, Boat, & Bae, 2013). When

educators use concepts of universal design, they not only think critically about the physical spaces children occupy, they also think about how the learning experiences they create engage and support learners with diverse background experiences.

Teachers use elements of the environment to engage students, such as light play with shapes.

Universal design principles encourage educators to (a) develop curricular routines and classroom spaces that meet the needs of all children, (b) recognize learning pathways for children are unique, (c) appreciate learning differences as a natural part of classroom communities, and (d) use open-ended learning opportunities that allow children to represent their understandings in diverse ways (Dinnebell et al., 2013). As described, these principles advocate for learning environments that are inclusive, flexible, and open for all learners as opposed to making modifications for individual children. The universal design principles ask educators to consciously attend to both the physical aspects of an environment that define learning spaces as well as the intangible classroom experiences that engage children emotionally, socially, and cognitively.

5.4a Physical Literacy Learning Environments

At the most basic level, the physical environment refers to the design and layout of the classroom. The decisions educators make about how to arrange the physical environment within a classroom has implications for the types of activities, behaviors, and learning routines children and educators experience. While there are elements of the physical environment that are beyond an educator's control, (e.g., the overall size of the space and design details like sinks, bathroom accessibility, and electrical outlets) educators enjoy control over the learning spaces found in early childhood classrooms. Effective learning environments use a combination of visual cues (e.g., signs and pictures to identify learning spaces or processes) and structural features (e.g., rugs, low shelves, beanbags, play furniture, and tables) to divide the classroom into distinct learning spaces. The visual cues and structural features work together to guide children's behaviors, engage learners, and inspire literacy explorations.

To meet children's learning preferences and needs,

classroom designs include flexible individual and small group learning spaces. Classrooms also need a space large enough for a whole group of children to come together for shared experiences. The whole group space may actually prove to be the trickiest of all to "fit in." The space needs to be large enough and situated so all children are able to share in the learning opportunity. Children's sight-lines need to be clear and they need to be able to sit comfortably. For some children, this means providing wiggle cushions or small chairs, others need room to safely extend or bend their legs as needed to ensure they are comfortable. Traffic flow in and around this space needs to be flexible and open as well. An open design will allow guests, teachers, and children to enter and move around the space more easily and enhance children's engagement.

Whole group space works well for read-aloud time.

Whole group space works well for read-aloud time.

Establishing the primary learning areas first will help divide the room into distinct activity zones. When initially

designing classroom spaces for children, educators stop to identify the *types* of learning opportunities they want young children to experience and *where* these experiences will take place. Common early learning areas include, but are not limited to, library nooks, home living corners, STEM centers, art exploration stations, and construction zones. The names of the learning areas suggest the types of learning activities children will experience and promote different kinds of play and explorations. Thoughtful arrangement of learning centers and activity zones within a classroom supports positive literacy behavior patterns.

Pause and Consider: Establishing Effective Classroom Climates

Take a moment to read Table 5.2 "General Guidelines for Establishing an Effective Classroom Environment." As you read, consider how each suggestion might impact children in the learning environment. After reading the selection, make a mental list of characteristics of a literacy rich classroom, or use materials to create a mock map. One possible app for classroom design can be found at: http://classroom.4teachers.org/

Table 5.2 "General Guidelines for Establishing an Effective Classroom Environment"

General Guidelines for Establishing an Effective Classroom Literacy Environment

- Divide the classroom into quadrants (wet, dry, noisy, quiet)
- Ensure wet areas are separated from dry areas and noisy areas are separate from quiet areas
- Design flexible whole, small group, and independent learning spaces
- Use furniture and materials to provide boundaries and define learning spaces
- Carpets, low shelving, front-facing book shelves, tables, chairs, open storage bins with writing tools and material, and easels inspire children's engagement within particular spaces
- Create soft and hard literacy play and learning spaces by offering flexible and moveable seating options, diverse writing surfaces, and cozy spots for reading, writing, and conversing
- Organize materials for easy accessibility to support literacy practices and make clean-up easier
- Label classroom spaces, shelves, and storage bins with words and pictures to guide children's patterns of behavior and infuse the classroom with meaningful print

5.4b Building Areas for Literacy-Rich Play

Intentional learning areas invite children to engage in hands-on, minds-on explorations of their literacy worlds. During play children use and develop critical thinking skills while increasing their oral language and other emergent literacy skills and understandings. As Heath (1983) explains,

> In their play, the children tell stories to each other or they monologue their creations. They frame parts of the whole drama of adulthood in sandboxes, corners of the playroom, or the play yard. But there they also declare themselves members of the world of children and members of a community which does not let its members ever go too far or too long away from the constraints of reality (p. 162).

Literacy-rich play spaces and learning experiences encourage children to explore their understandings of the world. To inspire children's active incorporation of diverse literacy practices in play, educators need to take time to reflect on (a) the amount of time children engage in dramatic and guided play experiences, (b) the accessibility of intentional materials that inspire creative literacy play opportunities, and (c) the language they use to scaffold children's understandings and support literacy-rich play experiences. Through their interactions with purposeful materials, educators, and peers, children manipulate and use language in flexible ways to learn about and influence their world. Literacy-rich play areas strategically infuse literacy tools (e.g. books, writing paper, pencils, stamps, envelopes, etc.) and props (e.g. mailboxes, puppet theatres, recipe boxes, lab coats, aprons, etc.) to increase children's incorporation of play scenarios that use their emerging oral language, reading, and writing skills (Walfersberger et al., 2004). "Literacy Enriched Learning Areas" provides examples of how educators enrich learning areas to intentionally promote children's literacy explorations.

As you review Table 5.3, consider how the materials

invite children to engage meaningfully in literacy rich spaces and nurture children's literacy understandings.

Table 5.3 "Literacy Enriched Learning Areas"

Literacy Enriched Learning Areas

Learning Area	Emergent Literacy Purpose	Examples of Relevant Literacy-Rich Materials
Library	• Connects young children to books • Promotes print awareness • Supports children's comprehension and interpretations of text • Extends children's oral language opportunities and enhances children's vocabulary through story telling	• Books on a range of topics • Books from multiple genres • Books with diverse representations of children and families (i.e., culturally, ability, socio-economically, geographically, and children and families with diverse gender and sexual orientations) • Puppets/Stuffed animals for children to read to and engage in story retelling • Soft materials (i.e., pillows and cushions) • Puppet theatres • Felt boards
Writing	• Encourages children to understand letters combine to represent words in a written form • Develops children's letter formation • Supports letter/ sound connection • Expands opportunities for children to write in personally meaningful ways	• Various types of paper • Writing utensils (pencils, colored pencils, pens, markers) • Clip boards • Hole punch/stapler for making books • Envelopes • Ink pads and stamps • Magnetic letters • Chalk and chalkboards • Dry erase boards and markers

Dramatic Play	• Inspires children's oral language and supports vocabulary development • Invites children to manipulate text in diverse ways • Promotes creative expression	• Themed props to encourage imagination and discovery • Bakery theme: recipe cards, cake boxes, cake pans, spatulas, etc. • Animal shelter: animal name cards, adoption certificates, veterinarian health charts, etc. • Post office: envelopes, mail boxes, stamps, boxes, labels, scales, etc. • Restaurant: menus, note pads, welcome signs, etc. • Writing utensils • Paper

Math	• Encourages children's oral language fluency with mathematical and scientific concepts • Extends children's vocabulary in personally relevant ways • Promotes mathematical literacy • counting, • Cardinality (the total number in a set), • Mathematical operations (adding, subtracting, multiplying, dividing) • Algebraic thinking, • Measurement, • Data collection, and • Geometry (shapes, lines, dimensions, etc.)	• Manipulatives • Counting bears • Snap cubes • Blocks • Cars • Collections of "things" • Paper • Graph paper • Tape measures • Rulers • Writing utensils • Weights

Art Exploration	• Extends children's voices by providing opportunities for children to use multiple mediums to express themselves and represent their ideas • Nurtures creativity • Promotes higher order thinking skills, including planning, designing, experimenting, and examining • Develops fine motor skills and eye hand coordination for detailed work with their fingers and hands	• Construction materials (know your learners–safety first as always) • Glue • Tape • String • Staples • Magnets • Hammer and nails • Scissors • Recyclables (boxes, cardboard tubes, cans etc., • Paper all kinds, sizes, and colors • Natural items (boards, sticks, rocks, slates, etc.) • Paint • Clay • Playdough • Crayons • Markers • Pastels • Pencils • Colored pencils

STEM (Science, Technology, Engineering, and Mathematics)	• Promotes inquiry-based thinking • Encourages children to ask questions about how their physical world works • Supports children's documentation of their thinking and wonderings using words, print, pictures, drawings, diagrams, videos, etc. • Domain specific vocabulary • Scientific method (e.g. investigation, hypothesis, research, inquiry) • Physical science (e.g. volcano, earthquake, ocean) • Biology (e.g., chrysalis, hive, stem) • Chemistry (e.g. reaction, dissolve, combine) • Technology (e.g. coding, streaming, cloud)	• Natural elements (leaves, shells, snake skins, dirt, water, ice, seeds, etc.) • Physical elements (ramps, marbles, wheels, magnets, pulleys, ropes, etc.) • STEM inquiry tools • Magnifying glasses • Graph Paper • Markers • Tape measures • Rulers • Scales • Science Logs • Measuring Cups

As the *Literacy Enriched Learning Areas* table demonstrates, once foundational structures are decided upon,

educators can enrich the learning environment with a variety of materials to scaffold children's literacy interactions. Classroom environments that are predictable support intangible, emotional elements that impact the nature of instructional literacy play experiences, children's learning progressions, and educator-child interactions (Reutzel & Jones, 2013). Intentional design strategies help educators create places where children feel comfortable exploring their environment and empower children to modify learning spaces to meet their play goals and preferences.

Children extend their play and build on their language with each other at the sensory table.

5.4c Print-Rich Environments

Print-rich environments promote classroom cultures that value literacy explorations. Literacy rich contexts intentionally display children' own writings, drawings, and pictures alongside a variety of children's books, writing materials, and engaging charts, diagrams, and signs. Print-rich

environments present children with a wealth of reading and writing materials and encourage children to see that print has meaning (McGee, 2007). In print-rich environments children observe adults using printed materials in a variety of ways and for a variety of purposes. In turn, children are guided by educators to use printed materials for their own play purposes. Therefore, careful attention to both the placement of print and the amount of print found within the environment is important.

Images, symbols, and text designed to cue children's interactions with text need to be strategically placed to draw children's attention and encourage sustained engagement. Writing materials, children's books, and other items that support children's literacy enactments (e.g., puppet theatres, construction signs in the block center, alphabet stamps in the art center) need to be both visually and physically available so that children instinctively use classroom resources to support their learning explorations. When educators place print-rich classroom literacy materials, including signs, materials, and books, within children's natural sight lines the literacy materials remain child-centric. This increases the likelihood that children will use the resources in personally meaningful ways. Print that is placed for intentional and functional purposes in "just right spaces" allows children to meaningfully engage and interact with the print. Conversely, print materials positioned in a space "too high" for children to visually or physically access, will not be easily incorporated by children into their play scenarios or learning experiences.

In addition to deciding where to position print-rich material, educators also need to consider the amount of print in the classroom. Classroom environments with *too much* print can be overwhelming and distracting to young learners. Environments that overload children's sensory capacities may impact how children interact with peers and adults and undermine children's literacy enactments. Ultimately, the print

displayed within the classroom should be done so in an intentional manner with children's literacy interactions in mind. For example, in a veterinarian dramatic play center thematic word and picture charts (e.g., bird, snake, dog, cat), scales for weighing animals, record forms for the children taking care of the animals, and relevant labels (e.g., water, food, check-in) support children's literacy play experiences.

Children's verbal statements and a photograph next to their artwork enhances the print-rich environment.

5.4c1 Critically responsive children's books. Children's books offer a rich foundation for children's literacy explorations. However, the quality of literature children are immersed in matters. Emergent readers, writers, and speakers need consistent opportunities to engage in texts they find compelling. Educators can use books to spark and provoke children's interests. Intentional literature experiences encourage children to consider multiple perspectives and allow children to vicariously experience worlds beyond their immediate classroom environment. Narrative texts (fiction

texts) invite children to problem solve along with central characters, explore places beyond their own communities, and listen to lived experiences of other people. Expository texts (nonfiction or informational texts) promote children's inquiry and encourage children to use texts as mediums for learning about how the world works and consider how people influence our communities. Educators play a critical role in determining children's access to print and their intentional selection of compelling children's texts is essential.

Children need to see themselves represented in the books embedded within their early learning spaces. In 1990, Dr. Rudine Sims Bishop published a seminal article titled, "Mirrors, Windows, and Sliding Glass Doors." Dr. Sims Bishop explains,

> Books are sometimes windows, offering views of worlds that may be real or imagined, familiar or strange. These windows are also sliding glass doors, and readers have only to walk through in imagination to become part of whatever world has been created or recreated by the author. When lighting conditions are just right, however, a window can also be a mirror. Literature transforms human experience and reflects it back to us, and in that reflection we can see our own lives and experiences as part of the larger human experience. (p. ix)

Children's early literacy experiences offer the opportunity for children to learn about new worlds or ideas. For example, in the book, *Bilal Cooks Daal*, the main character, Bilal, cooks daal with his friends who have never had it or made it before (Saeed & Syed, 2019). Daal is a term used throughout India and South Asia to broadly identify a variety of spiced lentil and bean-based soups. The dish is described in the book along with the cooking process and serves as a window for children who have never heard of daal, a sliding glass door for children to walk through and experience new cultural practices (such as how daal is served in the bowl and the preparation

practices), and a mirror for children who regularly eat daal with their friends and family.

Daal is frequently served with rice or flatbread like naan. So, for Prashant, *Bilal Cooks Daal* serves as a mirror, reflecting the familiar food items his family prepares at home. At the same time, the story offers windows and sliding glass doors for his peers and educators who may not be as familiar with Indian or South Asian cuisine. The story invites all children to vicariously experience the rhythm of cooking daal and can subsequently be used to extend the play scenarios Prashant and his friends create. Diversity rich classrooms encourage conversations and offer children opportunities to learn about people and families that are different from themselves (Baker, 1990).

NAEYC's 2019 *Advancing Equity in Early Childhood Education* underscores the intentional infusion of literacy opportunities that reinforce the dignity of each child, stating "children of all genders, with and without disabilities should see themselves and their families, languages and cultures regularly and meaningfully reflected in the environment and learning materials" (NAEYC, 2019, p.7). Educators must always be mindful that in selecting materials, they are exercising power to choose which windows, mirrors, and sliding doors children will be exposed to. Accordingly, it is important for educators to infuse children's literature that show children and families of color as the central characters even if the classroom demographic appears to be predominately white. When selecting texts, educators need to "remember that the learning environment and its materials reflect what [they] do and do not value by what is presented and what is omitted" (NAEYC, 2019, p. 7). With this power comes a responsibility to use a critically responsive lens when selecting children's texts. Diverse texts allow children to celebrate and honor cultural, linguistic, socioeconomic, ability, family, and gender diversities. It also

creates opportunities for educators to challenge storylines that stereotype, misrepresent, and marginalize.

Pause and Consider: Diverse Children's Texts

Looking for Diverse Children's Texts?

If you are currently in an early learning context, take a moment to review the children's texts available to your young learners. Alternatively, take a moment to reflect on the diversity of children's text you read as a child. Mentally tally how many texts included children and families of differing ethnic, economic, ability, linguistic, and regional backgrounds. Then consider, whose voices were underrepresented or not represented in the mental evaluation you conducted? Consider if generalizations, stereotyping, or misrepresentations are present. How might the texts you reviewed serve as windows, sliding glass doors, or mirrors for children?

Developing literacy opportunities and class libraries that meaningfully infuse books with children and families that bring diversities to the classroom takes planning. Fortunately, there are a number of resources educators can access to support their efforts in acquiring diversity rich texts. Take a few moments exploring some of the resource sites in Table 5.4 "Finding Exemplary Children's Books." Then, make a plan for enhancing children's access to a wide variety of texts with multiple cultural, familial, and ability representations.

Table 5.4 Finding Exemplary Children's Books

Finding Exemplary Children's Books

Resource	Description	Web Link
American Library Association (Coretta Scott King Award Books)	The Coretta Scott King Award recognizes African American authors and illustrators capturing the African American experience.	https://bit.ly/3Au2L23
American Library Association (Pura Belpré Award Books)	The Pura Belpré Award is presented to a Latinx author or illustrator capturing the Latinx cultural experience.	https://bit.ly/3yyY2ff
American Library Association (Schneider Family Book Award)	The Schneider Family Book Award recognizes authors and illustrators presenting stories of the disability experience for children.	https://bit.ly/3s2gURf
Learning for Justice	Learning for Justice is a project of the Southern Poverty Law Center that published guidelines to support educators' considerations of children's texts. The free resource guides educators to use a critical lens when selecting text for children.	https://bit.ly/3lM9kcv

The National Museum of the American Indian	The National Museum of the American Indian online bookstore presents a selection of texts that show children contemporary experiences of Native Peoples and challenge stereotypes that continue to marginalize tribes.	https://s.si.edu/2VwcV3J
National Council for the Social Studies	The National Council for the Social Studies Carter G. Woodson Book Award also honors a few children's texts each year "that depict ethnicity in the United States" (NCSS, YEAR)	https://bit.ly/3s3s5ch
We Need Diverse Books	WNDB provides a platform for curating "literature that reflects and honors the lives of all young people" (WNDB, 2020).	https://bit.ly/3yDhg3o

5.4d Assessing Early Literacy Environments

A number of program evaluations are currently used in early education contexts to guide early educators' efforts designing classroom spaces, negotiating and nurturing relationships, and facilitating effective literacy experiences. In Chapter 6: Exploring Emergent Literacy Assessment Practices there is a more detailed discussion of early childhood education literacy assessment practices for young children. For the purposes of this chapter, three evaluation scales are

considered to demonstrate how elements of classroom environments are captured in evaluation instruments and help guide program development and instructional practices in diverse early childhood contexts. The Classroom Literacy Environmental Profile (CLEP; Wolfersberger et al., 2004), the Early Childhood Environment Rating Scale (ECERS-R; Harms et al., 2014) and the Early Language and Literacy Classroom Observation (ELLCO; Smith et al., 2008) are grounded in research that demonstrates positive correlations between the unique environmental factors itemized on the scales and children's learning. These tools help educators understand how the physical environment and human interactions influence children's learning. Table 5.5 below summarizes the broad categories emphasized in each assessments' observational protocol.

Table 5.5 Classroom Literacy-Focused Assessments

Classroom Literacy-Focused Assessments

Early Childhood Environment Rating Scale (ECERS; Harms et al., 2014)	Classroom Literacy Environmental Profile (CLEP; Wolfersberger et al., 2004)	Early Language and Literacy Classroom Observation (ELLCO; Smith, Brady, & Anastasopoulous, 2008)
Environmental Subscales	Literacy Environment Subscales	Literacy Environment Subscales
1. Space and Furnishings 2. Personal Care Routines 3. Language-Reasoning 4. Activities 5. Interaction 6. Program Structure 7. Parents and Staff	1. Identifying Literacy Tools for Use in Literacy-Rich Classroom Environments 2. How to Use Literacy Tools or Props to Support Such an Environment	1. Classroom Structure 2. Curriculum 3. Language Environment 4. Book and Book Reading Opportunities 5. Print and Early Writing Supports

A quick analysis of the subscale titles across each evaluation tool reflects the central role environment plays in shaping children's literacy experiences. Across the scales some of the indicators focus on how the environment is constructed to support children's emergent literacy while other indicators consider the literacy interactions between educators and children. For example, the Early Childhood Environmental Rating Scale (ECERS-R) includes an indicator encouraging children to communicate in the classroom (Harms et al., 2014). An example of this indicator would be to include "materials that encourage communication throughout the room (e.g., puppet, small figures in block)" (Harms et al., 2014, p. 147). The Early Language and Literacy Classroom Observation Pre-K Tool

includes an indicator for supporting children's writing and gathers evidence demonstrating that educators engage children in "authentic uses of writing that are integral to their daily classroom experiences" (e.g., children make charts, dictate stories, participate in daily sign-in) (ELLCO, 2008, p. 36).

Early childhood educators will encounter diverse assessment tools across their careers. It is beneficial for educators to take time to understand the theoretical perspectives that inform the nature of the items on each assessment. It is also important for educators to consider the assessment tool can be used to enhance their work with young learners and the families they serve. Just as we use a variety of assessment tools to understand what our children know, we can use a variety of tools to analyze how we use intentional teaching practices to promote children's learning. Collectively, the human relationships, physical spaces, and literacy routines young children experience make up the essential components promoting children's emerging oral language, reading, and writing skills.

Figure 5.17 "Sharing a Writing Moment"

Relationships, routines, and spaces create opportunities for assessment.

Key Take-Aways

Educators' intentional interactions with children engaged in play experiences support children's emerging literacies (Saracho, 2004). In early childhood education contexts, play-filled experiences occur throughout the school day and are influenced by the decisions educators make when designing instructional spaces for young children. Children's diverse background experiences also provide rich funds of prior knowledge that educators use to extend children's literacy worlds and engage children in personally relevant play scenarios. As observed in the

opening vignette, educators play an important role in guiding children's attention toward literacy rich materials and scaffolding children's language explorations. Early childhood educators are essential guides for children as they learn to use the power of language to speak, read, and write their own literacy journeys.

Additional Resources

*Early Childhood Inclusion*Joint Position Statement: National Association for Education of Young Children and Division of Early Childhood of the Council for Exceptional Childrenhttps://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/ps_inclusion_dec_naeyc_ec.pdf

Literacy-Rich Environments, Reading Rockets https://www.readingrockets.org/article/literacy-rich-environments

Language and Literacy Environments in Preschool, Reading Rockets https://www.readingrockets.org/article/language-and-literacy-environments-preschools

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6. Understanding Emergent Literacy Assessment Practices

With Sehyun Yun

"Early childhood assessment should guide teachers to provide the best educational opportunities for children and, ultimately, benefit the child."

Piker & Jewkes, 2013

Mr. Costello's most recent set of observational notes were collected after reading *Chicka Chicka Boom Boom* (Martin & Archambault, 1989). A checklist Mr. Costello completed during a brief four-minute observational moment shows Isabella identified 10 lower case letters while playing with a friend at the water table. On this particular day, the water table materials encouraged children to float foam letters from the "shore" to "coconut island" for a letter parade. Mr. Costello smiles as he rereads the mini-note he attached to the checklist capturing how Isabella played with the lower case /b/ flipping it around and saying, "Look, I'm a B... Look, I'm a P...Look, I'm a B..." in a sing-songy voice as she danced the letter across the water. He knows this playful moment demonstrates a great deal about Isabella's alphabetic knowledge and shows a strength in her abilities to manipulate and recognize letters.

Educators use a variety of assessment tools and practices, like the observational assessment Mr. Costello reviews in the opening vignette, to gain insight into children's emergent literacy knowledge. Mr. Costello will keep his observational note, along with the other pieces of assessment data he gathers over time, to develop a holistic picture of Isabella's emerging literacy skills. He knows when a single data point is combined with additional pieces of assessment information a more complete understanding of a child's literacy knowledge begins to emerge. Children's work samples,

data from standardized assessments, and documentation from other observational assessments collectively inform his understanding of Isabella's literacy enactments. By strategically combining formal and informal assessment sources to demonstrate what young children know, Mr. Costello embraces a strengths-based assessment approach and intentionally positions children like Isabella as active literacy agents ready to communicate, learn, and engage as readers and writers in the world.

6.1 Introduction

Early childhood educators play an essential role in ascertaining how young children are developing nuanced understandings of emergent literacy skills. Embracing assessment as an ongoing and recursive practice supports educators' efforts communicating children's progress in meaningful ways. Strong assessment practices help engage diverse stakeholders including families, administrators, accreditation agencies, and children. Moreover, assessment data guides the instructional decisions educators make on a daily basis to enhance and promote young children's rapidly evolving literacy skills and understandings. Accordingly, learning how to use diverse sets of assessment tools and interpret data to gain insight into young children's evolving agency as readers, writers, and communicators is a critical part of an early educator's professional practice. This chapter prepares educators to develop, implement, and interpret a variety of literacy assessment tools to document and enhance children's emerging literacies.

This chapter will explore the following questions:

How does becoming *assessment literate* allow educators to see, support, and document children's emerging literacy skills?

What kinds of assessment tools do educators use to gain insight into young children's emerging literacy skills?

How do early educators integrate a variety of assessment practices into their curricular routines to document children's emerging literacy skills?

6.2 Becoming Assessment Literate

Our text focuses on examining a comprehensive collection of literacy practices and strategies to ensure early educators are well prepared to nurture young children's emerging literacies. Determining how to facilitate literacy experiences to meet individual children's needs and interests relies on an educator's knowledge, use, interpretation, and integration of a variety of assessment data points. To effectively

engage children in rich language, reading, and writing experiences educators must become *assessment literate*. Assessment literate educators possess a strong understanding of a variety of assessment practices and know how to interpret assessment results to inform their decisions about curricular experiences for learners (Popham, 2011). Because assessment results influence learning opportunities for children, it is important for educators to develop intentional and ongoing assessment practices and routines that illuminate children's literacy learnings. Assessments are designed to meet specific purposes and provide evidence of a child's knowledge or skill at a particular moment in time. However, children's emergent literacy knowledge involves the integration of complex language-based practices and it is unlikely a single assessment tool will provide all of the data necessary to make fully informed decisions. Therefore, knowing that all assessments have limitations, early educators need to develop a robust understanding of how, when, and why they use specific assessment tools to inform their work with children and families.

Educators and early education programs frequently use a variety of assessment measurement tools including standardized assessments, performance assessments, curriculum-based assessments, and observation-based assessments (Piker & Jewkes, 2013). Learning how to leverage diverse assessment tools to meet different purposes is an important aspect of an educator's work with young learners and families. Becoming assessment literate empowers educators to critically analyze assessment data for biases, inherent in all assessments, that may under-represent a child's emergent literacy knowledge. Accurate and full documentation of a child's understanding is not only essential for designing curricular experiences for learners, but assessment results also influence the types of interventions or additional special education services children and families

receive (McLean et al., 2020). Therefore, knowing how to use diverse sets of data to discuss a child's emerging skills strengthens educators' efforts advocating for children and families (Mindes & Jung, 2018).

Purposes for Assessment

- Educators use assessments to understand learning and development and to guide instructional decisions
- Assessments help educators identify children who might benefit from receiving additional intervention services
- Educators use assessment data to evaluate program practices and processes for areas of continued improvement and professional growth (Kidd et al., 2019; National Research Council, 2008).

Educators use technology to monitor children's development and make programmatic decisions.

Understanding how to use numerous assessment tools to advocate for children and families and guide young learners is emphasized by professional organizations, including the National Association for the Education of Young Children (NAEYC) and the Division of Early Childhood (DEC). Both organizations encourage early childhood educators to use data strategically to enhance young children's learning experiences. These organizations also maintain assessments for young children must be developmentally appropriate and advance the use of observational assessment practices to capture children's literacy performances within their natural environments (McLean et al., 2020, NAEYC & NAECS/SDE, 2003).

Fortunately, children's literacy performances are readily observable across a child's day as children talk, interact with text, and create their own drawings and writings to express their ideas. Knowing how to structure a child's environment to elicit literacy rich interactions will make documenting

children's literacy enactments easier. Similarly, learning how to identify components of children's literacy enactments and capture evidence of their emerging literacy skills as they play will enhance your savvy as an early childhood literacy educator. As you learn to see, document, and interpret children's emerging literacies you will develop a repertoire of assessment and instructional practices that will inform your work facilitating literacy experiences for young children.

6.3 Understanding Diverse Literacy Assessment Practices

Young children enter classrooms with diverse backgrounds and literacy skills. Children's daily emergent literacy expressions reveal what they know and understand about language, reading, and writing work. Interactions between language, reading, and writing are reciprocal and literacy enrichment in one arena bolsters knowledge and growth in another. Language development serves as a cornerstone for children's acquisition of reading and writing. The integral nature of language, reading, and writing develops throughout infancy, toddlerhood, and the early childhood years. Intentional early childhood educators use varied assessment tools and data sources to gain comprehensive understandings of children's cognitive literacy development across the domains of language, reading, and writing. Accordingly, literacy assessment is an important part of early

educators' mission to provide high-quality early literacy education for young children.

6.3a Formal Assessment Practices

Early educators use a variety of assessment tools to capture and analyze children's literacy development and learning. Assessments, by design, are broadly identified as either formal (standardized) or informal. In early childhood education, formal assessments are used for various purposes including screening, diagnostic, readiness tests, and program evaluation (Kidd et al., 2019). *Formal assessments* use standardized instruments and processes that are administered, scored, and interpreted in the same way for all children (Shepard et al., 1998). This section examines the types of formal assessments and how and when we will use them to support children's literacy learning.

6.3a1 Types of formal assessments. Formal standardized assessment results are translated into either norm-referenced scores or criterion-referenced scores. **Norm-referenced** scores allow educators to compare a child's performance on specific skills to the performances of other children within their peer group. Age-based standard scores, age equivalent scores, and/or percentile ranks are frequently used to communicate norm-referenced assessment results. Norm-referenced assessments may be used to determine eligibility for early childhood special education services, however "norm-referenced tools should be used with caution, as the accuracy and predictive value of these tools may be compromised when used with young children" (Ohio Department of Education, 2010, p. 9).

Alternatively, **criterion-referenced** scores communicate how well a child performs against a set of predetermined standards or criteria. Criterion-referenced assessments use numerical scores to represent the degree to

which a child has mastered specific content knowledge or gained proficiency with a set of skills. Both norm-referenced data and criterion-referenced data help educators understand what a child knows and understands at a given moment in time by either comparing a child's performance to the performance of other children in their peer group or analyzing the child's performance against specific criteria or developmental benchmarks (Brown & Rolfe, 2005). Table 6.1 presents a set of common criterion-referenced and norm-referenced assessments educators use to gain insight into children's emergent literacy practices. The table highlights the specific literacy components evaluated by each assessment.

Table 6.1 Common Criterion and Norm-Referenced Assessments

Common Criterion and Norm-Referenced Assessments

Assessment Tool	Description	Literacy Domains and Indicators	Norm o Referen
Ages & Stages Questionnaires, Third Edition (ASQ-3) https://bit.ly/3yCiCv3	ASQ-3 is a developmental screening tool designed for use with children between the ages of one month to 5 ½ years. It is a great assessment tool to partner with parents, making the most of their expert knowledge. Questionnaires are available in Arabic, Chinese, English, French, Spanish, and Vietnamese.	• Communication Development	Criterio
Assessment, Evaluation, and Programming System for Infants and Children (AEPS) https://bit.ly/3s4IZYj	AEPS is an authentic assessment that combines educator observations of children in natural play-based contexts with family interviews to evaluate and monitor children's developmental progressions. Appropriate for all children ages birth through 6 years. APES may be used to determine eligibility for additional services.	• Major Areas • Fine Motor • Gross Motor • Cognitive • Adaptive • Social-Communication • Social • Pre-academic • Literacy • Numeracy • Pre-writing	Criterio

Battelle Developmental Inventory – Third Edition (BDI-3) https://bit.ly/3AqjMu3	A play-based diagnostic assessment for children birth through age 7 years, 11 months. A supplementary assessment, the Battelle Early Academic Survey (BEAS) is for children 3 years 6 months – 7 years 11 months and offers additional assessments in literacy and mathematics.	• Communication (BDI-3) • Receptive • Expressive • Articulation • Literacy (BEAS) • Listening Comprehension • Fluency • Phonological Awareness • Print Concepts • Phonics and Word Recognition	Norm-r
Brigance Diagnostic Inventory of Early Development https://bit.ly/3xyEfeu	The Brigance is a developmental screener for children birth through age 7. The assessment uses observations, performances, and interviews.	• Language Development • Expressive • Receptive • Academic/Cognitive Development • Literacy	Norm-r and Criterio invento
Developmental Indicators for the Assessment of Learning, Fourth Edition (DIAL-4) https://bit.ly/3fLwU5o	DIAL-4 is a global screener. For children ages 2 years 6 months to 5 years 11 months.	• Language • Expressive • Receptive • Phonological Awareness	Norm-r
Phonological Awareness Literacy Screening (PALS-PreK)* https://bit.ly/3IM3R5f	PALS-PreK is an early literacy screening assessment designed to demonstrate children's strengths and areas where children may benefit from more intentional support.	• Name writing • Alphabet Knowledge • Beginning Sound Awareness • Print and Word Awareness • Rhyme Awareness • Nursery Rhyme Awareness	Criterio

Teaching Strategies GOLD https://bit.ly/3s7IgFx	TS GOLD is an observation-based assessment system for children from birth through kindergarten. It blends ongoing observational assessment for all areas of developmental domains and academic skills (literacy and numeracy). It is designed to document children's learning over time, inform instruction, and facilitate communication with stakeholders, but not for screening or diagnostic purposes.	• Language • Literacy	Criterio
Transdisciplinary-Based Play Assessment, Second Edition (TPBA2) https://bit.ly/37uaelr	TPBA2 is a diagnostic and progress monitoring play-based assessment to evaluate a child's development and provide intervention for children from birth to age 6. It is designed to evaluate four key developmental domains (sensorimotor, emotional and social, communication and language, and cognition).	• Communication Development • Language Comprehension • Language Production • Pragmatics • Articulation • Phonology • Voice and Fluency • Oral Mechanism	Criterio

6.3b2 Purposes for formal assessments. There are a

number of reasons early educators integrate formal assessments into early childhood contexts. This section examines four purposes of formal assessment. Each of these approaches to assessment provides us a window into young children's literacy development. Often the formal assessments used in early childhood spaces are selected by programs to align with national, state, or local requirements. Therefore, it is important for educators to understand the purposes of these selected instruments and how the data collected can be used. Figure 6.1 illustrates how assessment purposes and processes are mutually informative and fluid in nature.

Figure 6.1 Connection Between Assessment Purposes and Processes

Screening and **readiness assessments** are used in early childhood contexts to determine if a child needs further specialized evaluations or instructional interventions to ensure the child continues to thrive across developmental domains. These assessments seek to identify children who may benefit from additional intervention services designed to support a child's cognitive, oral-linguistic, social-emotional, or physical development. **Screening assessments** are designed to be implemented and evaluated quickly to determine if follow-up interventions are required to support a child's development. Consider the Apgar test performed on infants immediately after birth at the 1-minute and 5-minute mark. Focused on determining the child's physical wellbeing, the Apgar monitors a child's breathing, heart rate, muscle tone, skin color, and reflex irritability (Simon et al., 2021). If the child receives a low score on the scale, health care professionals will administer the necessary interventions to ensure a child thrives outside of the womb. Within school contexts, physical screening tools may be used to evaluate a child's hearing or vision, and if their performance on the screening tools indicate areas of concern, the child will be referred for further evaluation by appropriate care providers. Screening assessments are frequently administered to all students at the beginning of the school year in order to find students who need intervention as early as possible.

Figure 6.2 Screening and Readiness

Screening/Readiness

- **Easily implemented to see if children are meeting essential milestone expectations.**

- **Readiness assessments reveal what a child already knows about a set of precursory skills related to a specific domain.**

- **Typically, educators administer screeners to all children.**

Readiness assessments seek to reveal what a child already knows about a set of precursory skills related to a specific domain. Intentional educators use children's performances on readiness assessments to structure curricular opportunities for learners based on concepts a child is still acquiring and to build on knowledge the child already possesses. Readiness assessments should only be used to gain insight into what a child already knows and is *ready to learn*; they should not be used to perpetuate deficit perspectives that emphasize what a child cannot do which, by default, implies that a child is *not ready*. Simply put, although children may demonstrate different degrees of understandings at any given

moment in time, *all children are ready to learn*. Unfortunately, school systems sometimes use readiness assessments as predictive measures to group or track children into specific instructional programs or ability-based classrooms. While it makes sense to reflect on data gained through readiness assessments in strategic ways, educators and school systems should not use this information to make broad generalizations about a child's overall capabilities and should avoid using readiness data to make decisions or recommendations that limit children's curricular and experiential opportunities, such as suggesting a child defer enrolling in kindergarten with age-appropriate peers (Brassard & Boehm, 2007). When assessment results are used to make decisions about a child's access to curricular experiences, assessments become "high-stakes" for individual learners and the educational ramifications experienced by the child can persist throughout their academic career.

Early literacy assessments, developed for initial screening purposes, usually measure students' phonemic awareness, alphabetic knowledge, and print knowledge which are literacy competencies associated with children's future reading performance (Coyne & Harn, 2006). Results from literacy screening assessments help educators recognize which children *might* experience reading and writing difficulties in the future without additional instruction or intervention (Coyne & Harn, 2006). When considering early literacy screening data, educators should keep in mind that performances on initial screenings are *suggestive* of a child's future performance. In reality, research documenting children's literacy progressions overtime demonstrates that many students who demonstrate weaker phonological sensitivity (the ability to hear the sound components that make up words) on early literacy screening assessments will go on to become accomplished readers (National Research Council, 1998). This finding does not negate an educators' need to monitor a child's

emerging phonological skills. If a child continues to demonstrate weak phonological sensitivity, it is increasingly likely the child will need more intensive support to develop proficient reading and writing skills (National Research Council, 1998). Therefore, early educators are encouraged to use children's performances on screening assessments to provide intentional instructional literacy experiences targeting a child's knowledge in specific literacy arenas. When emergent literacy screening, diagnostic, and readiness assessments are used in this way, early childhood educators gain insight into what their students currently know and can plan literacy experiences by targeting areas of growth for individual children (Ivernizzi et al., 2010)

Educators observe children as they practice curricular concepts.

Diagnostic assessments also document areas of strength and areas for growth across specific literacy components. Diagnostic assessment enables teachers to modify and improve the current instruction practices to

support individual children (Coyne & Harn, 2006; Gilliam & Frede, 2015). Diagnostic assessments are more detailed than initial screening assessments and data from diagnostic assessments can help educators ascertain (a) the specific emergent literacy skills a child has mastered and which skills they are still developing, (b) the most promising intervention programs for children based on individual profiles, and (c) make intentional decisions about how to sort children into meaningful instructional groups (Coyne & Harn, 2006, p. 40).

Figure 6.3 Diagnostic

Diagnostic

- **Used with children who have been referred for additional assessments to determine eligibility for special education services, targeted interventions, or accommodations.**

- **Typically administered by outside assessment specialists (e.g. psychologist, intervention specialist, speech pathologist).**
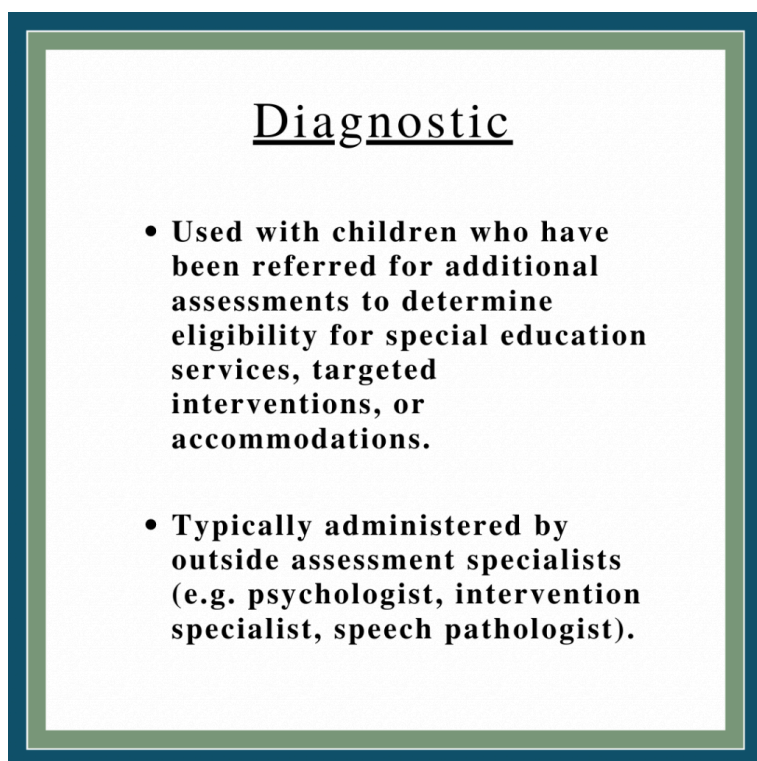
Progress monitoring assessments are used at periodic intervals overtime. Progress monitoring is appropriate for

typically developing children as well as children who are meeting developmental milestones at a slower pace than their age-level peers. The Transdisciplinary-Based Play Assessment (TBPA) (Linder, 2008) is an example of a formal assessment system designed to document a child's performances across developmental domains (i.e., sensorimotor, emotional and social, communication and language, and cognition). This particular assessment "presents a process for planning, implementing, and evaluating intervention for children from birth to 6 years of age who need supports to enhance their development" (Linder, 2008, p. 4). As the name suggests, TBPA is a play-based assessment and a play-facilitator guides the child through a series of play spaces designed to elicit particular performances. TBPA uses a team approach (including the family, educator, and other service providers) to evaluate a child's understanding and establish baseline developmental performance levels. Upon completion of the initial observation-based assessment, the team works together to identify learning goals for the child, determine eligibility for additional services, and make recommendations for interventions.

Subsequently, educators use the TBPA Age Tables and 9-point Goal Attainment Scales to monitor a child's development over time. The educator uses the scales to document the child's play-based performances attending to the strategic interventions embedded to promote the child's growth. The educator shares the progress monitoring reports with relevant stakeholders and uses the assessment data to modify instructional practices to support the child. Learning how to monitor young children's developmental progress in response to special intervention services they are receiving is an essential assessment practice for all early childhood educators. It takes time to understand comprehensive developmental progressions used by formal assessment systems like TBPA but, ultimately, they are rich resources for

educators, families, and early care programs. Such assessment systems provide educators with meaningful growth trajectories and support educators in the creation of developmentally appropriate learning experiences for all learners.

Figure 6.4 Progress Monitoring
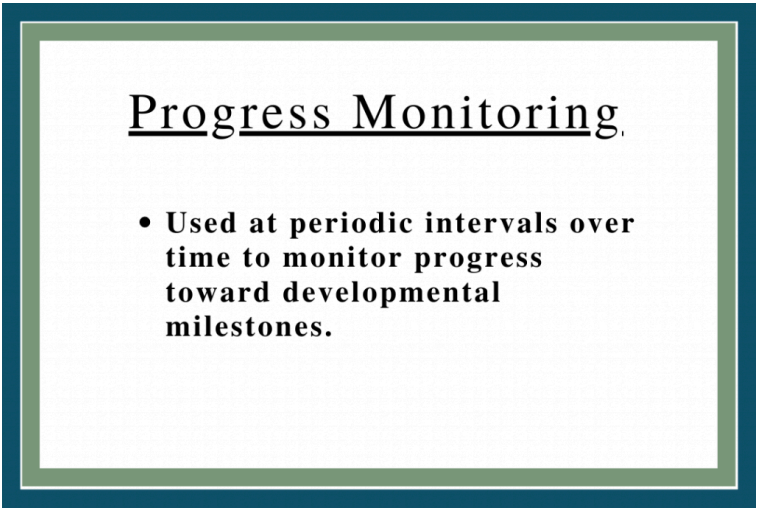
Formal assessments support educators' overall understanding of children's literacy progress. In collaboration with families and outside specialists, educators use formal assessments along with other assessment practices to encourage holistic pictures of children. Figures 6.2, 6.3, and 6.4 summarize the purposes for formal assessment and the section below explores informal assessment practices educators use to make instructional decisions with children in mind.

6.3c Curriculum-Based Assessments

Curriculum-based assessments, a subset of criterion-referenced assessments, document a child's mastery of specific goals and objectives after engaging in a particular curriculum. Early childhood educators use these assessments to identify the knowledge and skills the child possesses. Educators use information from curriculum-based assessments to design intentional instructional experiences in response to the child's demonstrated knowledge.

Teaching Strategies GOLD$^{®}$ and *Assessment, Evaluation, and Programing System for Infants and Children* (AEPS) are two examples of common, curriculum-based assessment systems designed to support educators' intentional documentation of children's understandings and guide curricular decisions linked to children's performances. Teaching Strategies *GOLD*$^{®}$ uses a digital portfolio assessment system to store and evaluate artifacts (e.g., photographs, videos, and observational notes) to capture children's literacy expressions as they interact with their environment in authentic ways. *GOLD*$^{®}$ uses color-coded developmental milestone charts to monitor and support a child's literacy growth. Similarly, AEPS is also grounded in observational assessment practices capturing children's play-based expressions. AEPS provides educators with observational data forms to document how well a child performs specific tasks within sets of developmentally progressive, criteria-based learning objectives. APES uses a scaled evaluation system (i.e., 2- *consistently meets criterion*, 1- *inconsistently meets criterion*, and 0- *does not meet criterion*) to determine how children are currently expressing their emergent literacy skills.

Early childhood programs also develop their own sets of curriculum-based assessment practices. When early care and education centers create their own curriculum-based assessment programs they still use developmental

progressions like the ones articulated in *Virginia's Early Learning & Development Standards* (2021) to inform their work with young children. Designing their own curriculum-based assessment practices affords programs flexibility to align practices with their unique pedagogical philosophies, values, and goals (e.g., Montessori, Reggio, outdoor learning schools, STEAM centers, etc.). Curriculum-based assessment practices help educators strategically structure learning experiences to monitor and promote children's progressions through critical literacy milestones.

Educators use formative assessment practices to provide in the moment guidance for young children.

6.3d Informal Assessment Practices

Informal assessments are frequently designed by the educator or the program to capture children's literacy performances throughout the school day. Informal assessments are distinguished from formal assessments in that the assessment tools have not undergone extensive

piloting with diverse student populations to determine developmental norms and establish inter-rater reliability, test-retest reliability, and validity metrics. The informal label does not mean these assessment practices are not as "good" as a formal assessment. In fact, informal assessment practices are essential aspects of early childhood educators' daily routines. Informal assessments are grounded in systematic observation practices and typically leverage a number of documentation tools (e.g., anecdotal notes, observational running records, checklists, work samples, portfolios, etc.) to capture children's literacy expressions within familiar play-based learning contexts. Data gathered within authentic contexts provides actionable information regarding the strengths and needs of individual children without the additional scoring or comparison of a child's performance to other children (Brown & Rolfe, 2005; Lonigan, 2006; Navarrete et al., 1990).

Educators develop informal assessment for a variety of purposes. Some informal assessment tools capture children's conversations, other tools document children's attention to rhyme schemes embedded in songs and read alouds. Educators also use informal assessment tools to gain insight into children's preferences and attitudes toward specific learning centers and literacy play materials. Well-designed informal assessment tools effectively document children's literacy knowledge and expressions as they engage with "tasks that are personally meaningful, take place in real life contexts, and are grounded in naturally occurring instructional activities" (Epstein et al., 2004, p. 6). When designing and implementing informal assessments, educators need a clear understanding of developmental literacy progressions. Educators also need to know what individual children already understand about how language, reading, and writing interact to create literacy learning experiences and environments that support children's emergent literacy knowledge (Navarrete et al., 1990). As educators continue to capture children's literacy expressions

over time, the intentional informal assessment notations accumulate in incremental ways to generate a more holistic representation of children's literacy repertoires. In turn, as educators' knowledge of each child continues to grow, they are able to make intentional instructional and curricular decisions to better support children's literacy learnings.

When educators first begin using embedded assessment practices, it may feel awkward. Initially, children may pose for photos and perform for videos while the perfect authentic literacy enactments elude capture. Children may openly wonder why their teacher is constantly jotting notes, watching closely, taking photos, or making videos. That is wonderful. Invite children into the assessment experience, explain that capturing all of their thinking and creating shows what they already know about how the world works. When particular documentation tools are used frequently, children and educators view the assessment practice as a natural part of the classroom culture and the tools themselves become invisible.

6.3e Formative and Summative Assessment Practices

The terms *formative* and *summative* are frequently paired assessment terms focused on documenting children's learning as they progress through units of study. Educators use formal and informal assessment tools as formative and summative assessments to gain an understanding of a child's developmental progressions. Formative assessments are used to inform the next curricular and instructional decisions an educator will make to meet children's interests, strengths, and needs (Kidd et al., 2019). The formative assessment methods include "all those activities undertaken by teachers [...] to modify teaching and learning activities" (Black & William, 2010, p. 82). In order for these everyday assessment moments to be influential, educators need to (a) identify specific literacy

learning goals, (b) select an assessment method for capturing evidence of the child's emergent literacy performances, (c) create a plan for analyzing the assessment data collected, and (d) take time to interpret the assessment data to understand how a child is performing in relation to the specified literacy goals.

Questions Guiding Educator's Interpretations of Formative Assessment Data

- What literate behaviors are children currently enacting?
- What aspects of literacy are children mastering?
- What literacy behaviors are children ready to begin integrating in the future?
- What instructional scaffolds, models, and materials can I implement to support the child's literacy development?
- What other information do I need to gain a more complete understanding of the child's literacy development?

While formative assessments capture how a student is performing in the moment and support an educator's efforts to promote a child's learning in the near future, *summative assessments* seek to present a final (or summative) evaluation of student learning (Kidd et al., 2019). Summative assessments are often utilized at the end of instructional units to "capture what a student has learned" (National Research Council, 2001, p. 25). Early education centers also use summative assessment

results to evaluate overall program effectiveness (Kidd et al., 2019).

Questions Guiding Educator's Interpretations of Summative Assessment Data

- How does a child's literacy performances in language, reading, and writing compare to learning goals?
- How does the assessment data capturing children's overall literacy development this year compare to children evaluated in previous years?
- In what literacy areas are children meeting or exceeding expectations related to specified language, reading, and writing goals? And, what specific program literacy practices supported children's literacy expressions?
- In what literacy areas would children benefit from enhanced curricular development to bolster literacy expressions?

6.4 Assessment Strategies and Tools

Children possess a wealth of knowledge and curiosity that educators leverage intentionally to enrich, extend, and enhance the knowledge and skills children demonstrate. Assessment data guides educators' differentiation practices and supports their efforts to provide meaningful and relevant learning experiences for individual learner's literacy needs (Ivernizzi et al., 2010; Rosko, 2004). When considering how to embed effective assessment practices into daily instructional routines it is helpful to think of assessment as a series of ongoing evaluations that help educators' notice and note young children's literacy expressions. Intentional noticings influence how educators reshape the environment and curricular opportunities to continue to nurture and challenge a child's emerging literacies. To fully document a child's literacy understandings, educators need to feel comfortable using multiple assessment tools.

The following section describes a number of assessment tools educators use to capture children's literacy expressions. The assessment tools are flexible and can be used in a variety of ways to focus educators' intentional noticings. To fully represent a child's emergent literacy knowledge, educators frequently need to use a combination of assessment tools. Learning how to manipulate a core set of assessment tools eases educators' efforts embracing ongoing assessment practices. Anecdotal notes, observational running records, checklists, frequency counts, artifact sampling, documentation panels, and portfolios provide educators with a variety of options for capturing children's literacy expressions. These assessment tools can be used informally or to provide evidence as part of a formal assessment process (e.g., AEPSi, GOLD®, and Transdisciplinary-Based Play). The flexible nature of these assessment tools allows educators to capture children's literacy expressions throughout the day. Moreover, these assessment practices can become a regular part of children's and educators' daily routines.

6.4a Anecdotal Notes

Anecdotal notes are brief and descriptive notes made after a specific behavior or interaction occurs (Mindes & Jung, 2015). In the classroom, teachers write anecdotal notes to record student behaviors, skills, and performance and compile the anecdotal notes on students as a document system. The cumulative information can be used to track progress and changes in a child's behavior and performance as well as plan for activities and strategies to use in the classroom. Once environments are established, educators can use anecdotal notes to document children's literacy performances as they play with their peers in literacy enriched contexts.

Figure 6.5 provides an example of an anecdotal note captured by Jinah's teacher while she was writing a grocery list in the dramatic play center. As the teacher paused to watch and listen to Jinah and Emma, she focused in on Jinah's emergent writing process. Jinah's focused effort illustrates an emerging knowledge of the alphabetic principle and her ability to identify initial, and some ending, phonemes.

Figure 6.5 Example of an Anecdotal Note

Context	Anecdotal Note

Grocery Store themes in dramatic play centers encourage children to explore a number of literacy concepts. Inventory sheets encourage grocery workers to tally and count supplies to stock the shelves. Notepads prompt children to create lists to help them remember what they want to buy when they are the customer. Labels with pictures on the shelves and at the checkout support children's "reading" of the play environment.

Date: *Sept 7, 2021*

Jinah chose dramatic play during the center time. She and Emma decided to make fruit salad for their lunch and started to write a grocery list. They talked about which fruit they wanted to add in their salad. In a grocery list, Jinah mouthed the word apple and wrote AL with a red marker. Saying A and L as she wrote. She continued... WN (watermelon), GS (grapes). Jinah identified the uppercase letters A, L, G, S, W, N. Her grocery list shows

	she also understands the sounds of those letters.

6.4b Observational Running Records

Observational running records are detailed and comprehensive notes written while an event is happening. Running records capture an individual child's (or a group of children's) language and literacy behaviors in a short period of time, generally between 5 and 10 minutes. The extended nature of a running record requires planning to ensure the educator has enough additional instructor support to allow for a focused observation with minimal interruptions. When planning to conduct a running record it is a good idea to identify the child, the context, and the duration of the observation before scripting the observational data. Once a running record is complete, educators typically rejoin the learning environment or shift to observing another child. Evaluations of the running records are completed at a later time, when the educator has the time to intentionally analyze the child's performances against relevant milestones, trajectories, or benchmarks. Educators use running records throughout the year and the collection of records reveals a child's growth overtime.

Figure 6.6 provides an example of a running record focused on a child's language patterns, physical performances, and emergent reading skills. During this observational

assessment moment, Ms. Everston planned to observe Danielle during outdoor recess to document who she decided to play with and the storyline she decided to enact. During the observation block, Ms. Everston worked to write down everything she directly observed regarding the child's actions including body movements and gestures, verbal exchanges, and facial expressions. Notice that she is not involved in Danielle's play while writing notes, and in her written notations she refrains from making judgements or assumptions about the child's intentions or literacy performances.

Figure 6.6 Example of a Running Record

Date: 10-26-2020
Time: 2:15-2:22
Child: Danielle (age 2 ½ – 30 months)
Place: Playground
Setting: Transportation Track
Others involved: Miss Haskins (preschool teacher -MH)

Observer: Ms. Everston
Objective for this observation:
To assess how Danielle spent her time at the playground and how she used language to communicate with her peers and adults while interacting with them.

Time	Observation
2:15	Danielle walks up to a tricycle and points at it. She looked at the teacher who was assisting another child. Miss Haskins (MH)- "Sure, you can ride the tricycle, Danielle." Danielle holds the right handlebar with her right hand and tries to lift her left leg to sit on the saddle. She repeats, "Ride bike." (MH) says, "Yes, Danielle go ahead. You can do it."
2:17	She lifts her left leg over and sits down on the seat and shakes her hand for the teacher to come. Again, she says, "Ride bike." MH "Where would you like to go?" D- "Go round" D gestures to the roundabout in the transportation track where two other children are going around and around the traffic circle.
2:19	MH – "Okay, so how do you want to get there?" (At the start of the transportation track she can choose to go around on a blue or green path.) D – "Go blue" D points to a path and points the front handlebars and tire to the blue path. D – motor noises begin "Broom, -oom" humming and buzzing of lips as D begins pedaling on the blue arrows.

2:21	D pedals and "brooms" with head leaning forward toward the handle bars and eyes focused slightly up. D's eyes go big and her voice gets louder ..."I see stop." D stops pedaling at the red stop sign on the track. "I go." D continues pedaling to the roundabout. (end-2:22)

Analysis date/time: *10/26/20 at 3:30*
Assessment: *Transdisciplinary-Based Play II (Linder, 2008)*
  Danielle's interactions with the teacher align with communication development milestones for a child of 30 months. She names one color, uses two- and three-word combinations to communicate her ideas. Danielle's command of the pedals on the tricycle is also developmentally appropriate. Danielle shows some evidence of problem-solving skill by selecting a color path to travel around. Danielle also demonstrated memory skills in her response to the stop sign by recognizing the sign and then performing the corresponding action. Danielle's reading of the stop sign also demonstrates that she is recognizing some familiar signs/symbols, an important emergent literacy skill.

Children learn familiar symbols, such as stop signs, even before they are connecting letters to sounds.

6.4c Checklists

Checklists are useful tools for documenting some emergent literacy skills and behaviors (Mindes & Jung, 2015). Intentionally designed checklists can help an educator attend to specific literacy performances in the moment. Checklists are particularly useful when an educator is learning to notice particular literacy expressions or capturing a child's expressions during play. Educators can use checklists to quickly document specific literacy skills and use the list to determine subsequent instructional opportunities. Checklists do not indicate how well a child performs, they document moments when a child did or did not perform a particular literacy skill. In the opening vignette at the beginning of this chapter, Mr. Costello used

a checklist to document the letter names Isabella readily identifies as she plays with letters at the water table. Figure 6.7 provides an example of a letter identification checklist designed to document children's letter play across a variety of contexts. Notice how this checklist is enhanced with a spot for anecdotal notations. Adding a space for anecdotal notes helps mediate the fact that a checklist alone provides limited insight into a child's literacy performances.

Figure 6.7 Observational Checklist

Observation Checklist

Alphabet Play

Location: *Water Table*

Context: *Chicka Chicka Boom Boom Letter Island*

Letter Focus: *26 lower case letters*

Child's Name: *Isabella* **Date:** *Nov 10*

Letters

☒ ☒ ☒ ☐ ☒ ☐ ☐ ☐ ☐ ☐ ☐ ☒ ☐ ☒ ☒ ☒ ☐ ☐ ☒☒ ☐ ☐ ☐ ☐ ☐ ☐
a b c d e f g h i j k l m n o p q r s t u v w x y z

Anecdotal Notes: *Isabella flipped the lower case b around singing, "Look, I'm a B... Look, I'm a P...Look, I'm a B..." in a sing-songy voice as she danced the letter across the water. Note: Play ended before she interacted with any additional letters.*

6.4d Artifacts

Collecting artifacts as evidence of children's literacy expressions is an essential authentic assessment practice for early childhood educators. Artifacts provide evidence of children's literacy expressions and learning at a particular moment in time. Photographs, videos, work samples, child generated products, and audio recordings of children engaging in literacy explorations are some examples of artifacts educators collect over time to understand children's emergent literacy performances. Deciding what artifacts to hold onto and what artifacts or archival moments to pass by can be overwhelming as educators first begin collecting documentation of a child's performances. To begin the process, consider collecting at least one type of literacy-focused artifact (e.g. a photograph, a short video, a writing sample, etc.) from each child every week. As each artifact is collected, use the developmental reading, writing, and language progressions the school uses to notice what can be readily observed about a child's literacy knowledge. With practice, recognizing when an artifact yields important insight about a child's literacy knowledge and how to analyze different artifacts becomes easier. Over time, these authentic assessments are joyful reminders for educators and families of how much a child learns over the course of a year.

6.4e Frequency Counts

As the name suggests, frequency counts are used to document how often a particular event occurs. Educators create frequency count charts to capture how many times a child performs or engages in a particular literacy event. For example, an educator might use a frequency count to monitor how often a child self-selects reading a book in the class library or uses the puppet theatre to tell a story. The information

provided by such frequency counts provides some insight into where a child spends their time, but the information is limited. A frequency count does not capture *how* the child is interacting with the literacy rich materials and might not capture other play spaces where the child is using their literacy skills (e.g., when the child uses cookbooks and recipe cards in the kitchen). Therefore, frequency counts should not be used in isolation to draw conclusions about the child's overall literacy enactments.

On the other hand, literacy focused frequency counts may be most impactful when educators use them to determine how frequently particular learning centers and literacy-rich materials are utilized by the children over a period of time. This type of data could help an educator notice trends in the children's literacy play routines to make intentional changes to the children's instructional environment. A frequency count could lead an educator to enhance particular spaces by adding writing or supplemental text materials, or prompt the educator to model the use of specific literacy tools to support children's literacy-based play (e.g., felt boards, dry erase boards, graph paper).

6.4g Event Sampling

Event sampling is used to document a child's performances during a specific event. Charts can be used to quickly capture when a child engages in particular literacy events. Figure 6.8 provides an example of an event sampling chart designed to strategically focus on children's explorations of fiction and non-fiction texts in the class library. Collected over an extended period of time, the basic event sampling chart information yields some insight into children's text preferences and what the child attends to when reading or retelling a text. When more information about a child's behavior is desired, event sampling may be combined with

an *antecedent*, *behavior*, and *consequence* (ABC) assessment frame to support an educators' sequencing of a particular event. Figure 6.8 provides an example of how the teacher, Mr. Thompson, uses the ABC assessment frame to analyze a video he captured of Jonathan in the library corner. Mr. Thompson uses the ABC lens to focus on Jonathan's emergent literacy practices while he retells a story to his friend and some stuffed animals in the library. The analysis space summarizes the child's interactions and articulates the specific knowledge, skills, and dispositions observed throughout the event.

Figure 6.8 Event Sampling

Reading Event Sampling

Name	Self-selects narrative text	Self-selects informational text	Uses pictures to orally retell the narrative story	Uses pictures to explain informational text
Jonathan	10/3*	10/1	10/3*	
Liam	10/2			
Olivia		9/23*		9/23*
Patricia	9/21	9/23	10/1	
William	10/8	10/15		

*Event sampling with video and ABC notations.

Jonathan 10/3 (Video recording) Library			
Time	Antecedent	Behavior	Consequence
10:06	*Jonathan says, "Let's play storytime."*	*He takes Anya's hand and they go to the library center.*	*After reaching the library center, Jonathan arranges the small rocker in the corner to create an open area on the carpet for his class. Anya begins putting stuffed animals in a semicircle facing the rocking chair.*
10:09	*Jonathan says, "I will read first."*	*He goes to the library shelf and begins looking for a book to read.*	*Anya sits down on her knees behind the circle of animals.*
10:12	*Anya says, "Let's read the penguin book with the lollipop."*	*Jonathan, laughing says, "Okay" and picks up The Penguin and the Lollipop. He opens the book on his lap with appropriate directionality to support his reading.*	*Anya folds her hands in her lap after repositioning a bear that flopped over, getting everyone ready to listen to Johnathan read the story.*

10:14	*Jonathan holds up the book with the cover facing Anya.*	*Jonathan says, "Today we are going to read, little penguin eats a lollipop."*	*Anya and the animals wait.*
10:16	*Jonathan puts the book back down on his lap and says, "This is Little Penguin. He made a mistake and ate the little bird's lollipop."*	*Jonathan pauses to turn the book around so the animals and Anya can see the pictures.*	*Anya says, "Oh no, little bird looks mad."*

Analysis: *Jonathan demonstrated a sense of directionality while reading the book. He paused in the beginning to state the title and mimic the way we begin storytime. He began retelling the story on the first page of the book where the story begins. Jonathan's retelling demonstrates comprehension of the storyline elements, including the main characters and the problem.*

6.4h Time Sampling

Time sampling can be used to observe a child's engagement with a particular activity such as constructing a block tower.

Time sampling is another observational strategy used by educators to capture how a child engages with their environment over a period of time. Time sampling is particularly beneficial when an educator is seeking to determine how long a child sustains their engagement in a literacy-rich play center. To conduct a time sampling, an educator selects a focus child, determines which behaviors will be observed, establishes the duration for the time sampling period, and sets the time intervals they will use to monitor the child's engagement. In Figure 6.9 Ms. Haskins captures Aleksandra's block center play. Notice how the child draws on her emerging literacy skills as she strategically constructs her farm. What materials and practices in the classroom are in place to support her literacy skills? How does the educator support her creative efforts?

Figure 6.9 Time Sampling

Time Sampling

Date : *April 3, 2021*

Observer: *Ms. Haskins*

Child's Name: *Aleksandra*

Time interval: *5 minutes*

Time of Day: *Center Exploration Time (10:30 – 11:30)*

10:30	Aleksandra (A) heads to the block area.
10:35	A – is using a construction blueprint photo to build a tower following the image – she is working by herself
10:40	A – is selecting a new blueprint photo
10:45	A – is sorting through blocks to find the size she needs for her second tower
10:50	A – is building her second tower about 12 inches from her first tower
10:55	A – is still working on her second tower
11:00	A – is sorting through the blueprint photo file to find another tower her second tower is complete
11:05	A – is working on a third tower Enrique and Emily pull the train tracks out next to A. A says, "Please make the train over there. By my garage." E and E move over a bit to make room. Looking at her towers, Enrique says, "Where are the trucks?"

11:10	*A – places the last block on the tower and stands looking around the room* *-she moves to the writing center and collects a clipboard, small index cards, and a crayon* *– she goes back to her towers*
11:15	*A – is writing on one of the index cards* *Another index card is in front of the first tower she built.* *In blue crayon she wrote "HS" on the index card.*
11:20	*A – has three index cards placed in front of her towers "HS" "B" and "G"*
11:25	*A – is pulling cows and horses from the animal basket and putting them around the tower with a B* *cars are placed under the G tower*
11:30	*A – asks to take a picture of her farm so that she can make it again tomorrow* *Ms. Hamilton takes a photo and suggests putting a big fence around her farm so she can continue making her farm the next day.*

Analysis: *Aleksandra worked with intentionality to create her farm today. She mentioned to Ms. Hamilton that she wanted to keep it so that she could play "farm" with her friend Sara tomorrow, who was not here today. Ms. Hamilton asked her to tell her about her farm, and Aleksandra showed her the house, the garage, and the barn. The initial consonants are reflected in the signs she made, as well as an ending consonant sound in house. This demonstrates her emerging writing skills and developing phonological awareness. Using the blueprints for the towers also provides insight into how she is reading images to create and interpret her world.*

6.4i Assessment Practices for Communicating with Families

Early childhood is an exciting time for capturing young learners' emerging literacy performances and for sharing children's growth with family members and other relevant stakeholders (e.g., special educators, psychologists, other educators, and program administrators). Children continually acquire new insights about how language works, how text conveys meaning, and how their drawings, scribbles, and letters work to communicate their ideas to others. Young children's literacy expressions are numerous and rapidly evolving. Therefore, educators need to develop systematic ways for gathering children's literacy performances and sharing their efforts with others. Strong assessment practices inform conversations with parents, colleagues, and other professionals as they consider how to best support children in their development. Documentation panels and portfolio assessments are two holistic assessment practices educators can use to illuminate children's emergent literacy performances. These assessment tools encourage educators to use strengths-based assessment practices, invite children to actively reflect on their own learning, and celebrate children's growth by making children's literacy understandings visible to themselves and others.

6.4i1 Documentation panels. Documentation panels provide a public space for sharing children's work, posting children's plans, and capturing the questions the children want to resolve. Documentation panels are a unique assessment tool designed to explicitly capture a curricular project as it unfolds. The practice seeks to make learning visible and stems from the Reggio Emilia philosophy. Traditionally, children and educators used bulletin boards, blank walls, and hall spaces for posting

timelines of collaborative explorations. Today, digital photo journals and other electronic platforms also provide meaningful spaces for sharing and documenting children's explorations while taking up minimal space in the classroom. Documentation panels differ from the other assessment practices discussed in this chapter, in that the children take an active role in creating the panels and are encouraged to use the practice as a way of synthesizing their thinking about a particular topic.

Children and educators use documentation panels to explore numerous topics and ideas that frequently emerge from children's own wonderings or interests. For example, the Time Sampling assessment detailed in Figure 6.4g ended with Aleksandra asking the educator to take a photo of the "farm" she created. Aleksandra's sustained focus on building the farm offered a possible starting place for engaging in an extended exploration of life on a farm. By pausing to preserve Aleksandra's work and photograph it for later reference, Ms. Hamilton and Aleksandra have started documenting the experience. Together they can brainstorm how to invite other children into their exploration and begin adding to her tower work.

Over time, the documentation panels accumulate collections of children's artifacts honoring children's investigative work. Artifacts such as children's drawings, responses to shared books, lists of books explored, photographs of block cities or sidewalk chalk art, educator's annotations, children's dictations, question boards, and more illustrate children's literacy performances and document their learning journey. In this way, the power of children's emergent literacy performances become a central assessment tool for driving curricular explorations and empowering children as learners. To promote the dynamic power of documentation panels, educators encourage children to share what they are wondering and invite children to identify what they want to

learn more about. Then, in collaboration with children, educators use documentation panels to set learning goals and support children's interests by intentionally embedding literacy-rich exploration opportunities.

Documentation panels describe children's curricular experiences, such as color explorations during wheel painting.

6.4i2   Portfolios.   Portfolio assessment practices encourage educators to integrate a variety of ongoing assessment practices to capture children's learning and development over time. Portfolios come in a variety of forms and serve a variety of purposes. Educators create emergent literacy portfolios to store evidence of children's literacy expressions. Any of the assessment tools discussed throughout this chapter are relevant portfolio artifacts. Portfolios offer educators and children a tangible way to capture, monitor, and evaluate children's diverse literacy enactments. Accordingly, portfolios are typically child specific and educators can work with children to select artifacts they would like to keep to share as evidence of their learning. When educators invite children to be a part of the portfolio assessment practice, it empowers children and encourages them to be active and engaged learners.

Digital portfolio platforms linked to assessment systems like Learning Systems GOLD® or AEPSi are becoming more   common   in   early   care   and   education   centers. Commercially available portfolio systems ease educators' efforts organizing diverse assessment artifacts and support educators' analysis of children's development through defined learning progressions. When early care and education programs use a common digital portfolio assessment system, it is easier to share children's learning with relevant stakeholders including families, other educators and early care professionals, and state agencies. Digital portfolios also expand educators' efforts engaging in program evaluations. Moreover, portfolio assessment   systems   establish   a   common   assessment language for reflecting on children's growth and allows educators across age levels to collaboratively analyze assessment data to make strategic decisions regarding curricular practices.

Digital Portfolio Assessment Platforms are Appealing

Digital Portfolios are

- Easily shared with relevant stakeholders
- Demand minimal classroom storage space
- Allow children and educators to preserve numerous artifacts and assessment records
- Offer meaningful assessment artifacts for families focused on understanding their child's growth

Pause and Consider: Preparing for a Literacy Conference

This chapter examined a number of assessment tools educators use to inform their understandings of children's emergent literacy progression. The chapter's opening vignette introduced you to Mr. Costello and his use of observational notes. The following vignette extends the narrative with Mr. Costello. As you read, identify the portfolio artifacts Mr. Costello will share with Isabella's parents to show how Isabella uses her emerging literacy skills in diverse and personally relevant ways throughout her school day.

Mr. Costello is preparing for a conference with Isabella's parents. He turns to review a set of artifacts he has collected over the first part of the year. The artifacts include the following items:

1) photographs of Isabella painting in the art center,

2) a video of Isabella retelling her favorite book to a friend,

3) a menu she created as a prop for the new restaurant the children created in the kitchen area after he read aloud Dim Sum for Everyone, by Grace Lin (2001), and

4) focused anecdotal notes and checklists he maintained when working with children in small groups or individual teaching moments. One of his anecdotal notes reveals Isabella demonstrated confidence generating rhyming words as part of a hopscotch game on the playground (bat and cat, see and bee, duck and truck).

Before reading on, consider what each assessment you noticed reveals about Isabella's emergent literacy development?

Now consider the following assessment possibilities. The photograph and the menu provide insight into Isabella's emergent writing practices. The photograph reveals insight regarding Isabella's fine motor development, including handedness, grip, and control with diverse writing instruments. The menu demonstrates Isabella knows that writing is used to reach a particular audience, has purpose, and can take on a variety of forms. Isabella's printed text also shows her emerging skills with the alphabetic principle,

phonological awareness, fine motor control, and automaticity with letter formation. The video of Isabella retelling *Dim Sum for Everyone* provides evidence of Isabella's comprehension of storylines, integrations of new vocabulary words, and perhaps how she relates personally to the text.

Collectively, the assessment strategies described across this chapter offer educators a variety of ways to intentionally notice and attend to children's emergent literacy practices. To effectively integrate ongoing assessment practices, educators begin with one tool and systematically add new assessment tools to their repertoires. Over time, educators build their confidence using, analyzing, and discussing children's performances becoming assessment literate.

Key Takeaways

Using diverse assessment tools to accumulate information capturing children's interests, understandings, and goals across all developmental domains (i.e., social, emotional, cognitive, and physical) allows educators to make informed instructional decisions about future curricular experiences (Kidd et al., 2019). Educators use their knowledge of the child, the curriculum, and literacy milestones when selecting an assessment tool to document a child's literacy expressions. In early childhood contexts, play-based

assessments capture children's literacy expressions as they interact with materials, peers, educators, and other adults in literacy rich environments. Ongoing, intentional, and child-centric assessment practices promote equity by honoring individuals' literacy progressions in meaningful ways. As Mr. Costello illustrated, diverse assessment practices yield rich and nuanced understandings of a child's emerging literacies.

Additional Resources

Early Childhood Assessment, Curriculum, and Program Evaluation Position Statement, National Association for Education of Young Children https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/pscape.pdf

Promoting Positive Outcomes for Children with Disabilities: Recommendations for Curriculum Assessment and Program Evaluation Position Statement, Division for Early Childhood of the Council of Exceptional Children https://www.decdocs.org/position-statement-promoting-positi

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Additional Images

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7. Language Development: Promoting Speaking, Listening & Communicating

"Language is the most powerful instrument of human progress."

Maria Montessori

Opening Vignette: Block Tower

Eighteen-month old Mark settled into a day of learning after being dropped off. He greeted his teacher, Ms. Claudia (quick hug), and said "Hi" as he looked expectantly at his classmates in the block area. At one point, he put his hand out, clenching and

unclenching as he reached for a large rectangular block. When Mark was finished with his block tower, he said, "Look!" and pointed to it, smiling proudly while looking at the teacher. As Ms. Claudia looked and smiled, he said, "I did it" and knocked the blocks to the ground while laughing.

7.1 Introduction

Speaking, listening, and communicating are vital to our ability to connect with the world. A baby's first words are often cause for celebration. Pointing and gesturing create opportunities for adults to meet a child's needs and see the resulting satisfaction on the child's face. In addition to verbal words, there may be sign language, and important pragmatic gestures such as kissing on the cheek when greeting, or raising or lowering one's eyes. These language exchanges not only foster understanding, but they are also social interactions that may create or strengthen bonds. Unquestionably, the ability to communicate rests upon the ability to express oneself, receive information, and to negotiate the social aspects of communication. In the example of Mark and Ms. Claudia, we see several components of language displayed. We see that Mark is using some words and phrases (hi, look, I did it) as well as communicating his wishes nonverbally through pointing and motioning toward the blocks. Mark also communicated using facial expressions and eye contact. This chapter will explore the following questions:

How is language conceptualized?

What are the components of language?

How does children's language progress on a continuum of development?

How do individual differences influence language development?

What can early childhood educators do to promote children's language development?

Figure 7.1 "Nested Literacy Model"

Nested Literacy Model

SUPPORTIVE CONTEXT

FAMILY/HOME

COMMUNITY

SCHOOL

READING

WRITING

LANGUAGE DEVELOPMENT
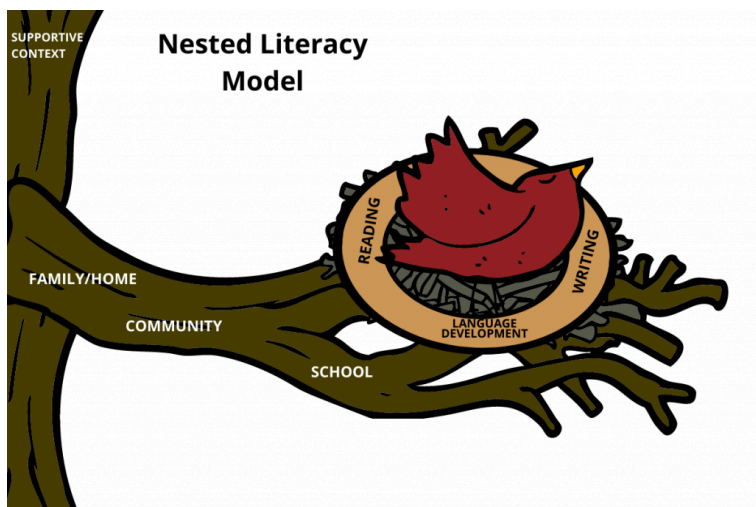
7.2 Conceptualizing Language Development

Language can be understood as a series of meaningful exchanges to communicate information, including sounds and sign language (Vygotsky, 1986). Toppelberg and Shapiro (2000) indicate language is comprised of sounds, the way these sounds are organized into words or parts of words, the organization of concepts being communicated, and language usage. This definition can be expanded to include expressive and receptive signals and the exchange between language partners. Receptive language reflects what a child is taking in as information is passed to them. Productive and expressive language are terms that are used interchangeably to indicate that the child is creating their own signals to communicate. Finally, there is a transactional component to language that includes not only the speaker's intent, but also the receiver's ability to comprehend what is being said, and the signals that indicate that the information has been received. Language is verbal and non-verbal, developing before a child is even born.

Theoretically and practically, language is a reflection of our cognition and a mechanism that helps us solve problems. Language emerges from our environment, and we use it as a medium both to understand (other people and ourselves) and to be understood. It is cultural, nested in our context, and because it fosters our ability to connect with others, deeply profound. Researchers and theorists explore a variety of questions when considering how language develops in children.


7.2a Is Language Innate?

Nativist theory suggests that we are prewired to learn language through an invisible framework, acting as an internal map. Noam Chomsky (1968), who invented this theory, believed that human language is complex and we could not learn it unless we already had a pre-existing physiological structure to prepare us. In effect, Chomsky is suggesting that we have an inborn structure for language, in the same way that we have a skeleton providings structure for our physical growth and development. Chomsky called this the "Language Acquisition Device." As evidence for his theory, Chomsky points to the fact that all over the world, humans develop language patterns with similar features such as verbs and nouns, called *universal grammar*. When children are exposed to language, it activates the language acquisition device, but our propensity for language is pre-existing. In fact, Chomsky describes language development as one would describe physical growth, as opposed to how one would describe learning. Chomsky is

essentially saying that although the environment is important, it is only strengthening something that already exists. This theory of language development is heavily focused on the biological, or nature, part of development.

7.2b Does Language Have Stages?

According to Piaget's Cognitive Developmental theory (Piaget, 1962), as the child grows and develops, they moves through normative, or predictable stages of growth. This growth process allows and compels children to build their own internal categories and rules of language. These internal structures, called *schemes*, become more complex as children interact with their environment to construct their knowledge. One illustration of this is that a child's understanding of the rules of language change and become more sophisticated as the child develops cognitively. For example, young children have a tendency to *overregularize* a word, such as calling all four-legged animals, "doggie." Eventually, as their cognitive schema becomes more complex, they recognize that four-legged animals have other distinguishable characteristics and can differentiate animals using this knowledge. Language then, is a display of the child's cognitive understanding. Language development reflects a complex interplay of opportunities and experiences. Accordingly, there are wide ranges in when children acquire or demonstrate particular language skills.
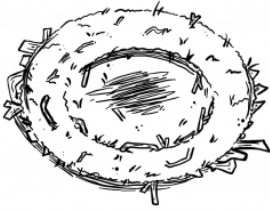
7.2c Does Social Interaction Create Language? (NEST)

Children learn language through social interaction.

Language helps us to connect with others and communicate our thoughts and purposes. Language is a series of social transactions. Lev Vygotsky (1986) described this process in his seminal work, *Thought and Language*, where he indicates that children have social exchanges of meaning that help them to unite their ideas and speech, termed *verbal thought*. In this series of cooperative exchanges, adults support children by preparing, creating, and providing environments and events. These transactions become pivotal to how children

construct their learning with the helpful support of a conversational partner. Children may be serving as the more experienced partner as they engage in transactions with less experienced peers or learn new expressions from their interactions with others. Vygotsky might argue that using "doggie" to describe all four legged animals creates opportunities to hear other animal names through social interaction. Indeed the act of conversation itself might help the child learn to self-correct and expand their understanding over time. Vygotsky also indicates that this language learning takes place in a social context, influencing how and where children learn to apply their verbal thoughts to interactions. In the Vygotskian view, language is less a *reflection* of learning, than a *tool* for solving problems, socialization, and completing tasks.

7.2d How Is Language Reinforced In The Environment?

Behaviorism theory of language development (Skinner, 1957) suggests that children learn about communication through a series of interactions where the sounds they make, the words they produce, and the gestures they use, are resultant from imitation and subsequent reinforcement. This reinforcement, whether positive, negative, or neutral, directs the language a child values and replicates. Children may produce utterances at random, but when we give children positive cues, it strengthens the likelihood that the child will repeat those utterances intentionally (Menn & Stoel-Gammon, 2005). For example, a babbling infant who says,

"mamamamama" may be reinforced by an enthusiastic mother who smiles and becomes animated as she says, "That's right! Mama!" In other words, the feedback cues in the child's environment influence their language development.

Pause and Consider: Is Language a Reflection or a Tool?

OR
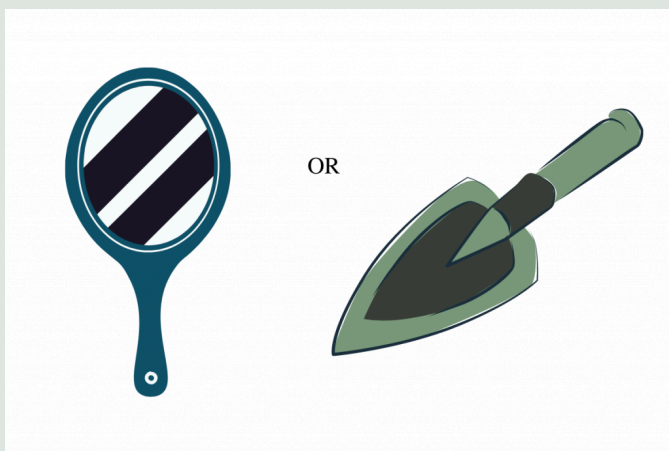
Five-year-old Hassan sat on the floor with both feet pushed into untied shoes. As he handled the laces, he said aloud, "First you loop the bunny ears, and then you fold them over. Pull it...Ah! I have to try again." The teacher came over and asked Hassan, "Do you want help?" He replied, "I can do it." The teacher then encouraged Hassan to keep trying. After several iterations of trying to make bunny-eared shoelaces into tied shoes, Hassan was successful. Upon noticing

Hassan's tied shoes, his teacher exclaimed, "You did it! Great job hanging in there. You kept trying until you did it." As you consider Hassan's words, can you see ages and stages reflected in his vocabulary? In this instance was the language being used as a *reflection* of Hassan's thoughts? Or was it a *tool* that helped Hassan to complete the task? What was the role of the social interaction between Hassan and his teacher?

7.3 Components of Language

Language can be broken into four domains: phonology, grammar, semantics, and pragmatics. These four areas refer to the sounds of language (phonology), how the sounds are put together (phonology and grammar), the meaning/content (semantics), and the use of the language (pragmatics) (Bloom & Lahey, 1978). Each of these domains includes the expectation that the language users will produce, receive, and comprehend the language.

7.3a Phonology

Phonology is the ability to distinguish and create the sounds of language (Bloom & Lahey, 1978). Phonemes are the smallest units of language, representing individual sounds. For example, the word "chip" has three phonemes: /ch/ /i/ /p/. Each of these three sounds is a phoneme. A phoneme focuses on the sound only, without regard for the letter or letter combinations. It is simply the components of sound that we hear in language. Children display phonemic awareness by attending to these sounds, demonstrating the ability to hear and isolate them.

Phonics is the area of phonology that emerges last, as children match sounds to letters and groups of letters.

7.3b Grammar

Grammar is the combination of how individual words and sounds are combined to express meaning (Bates et al, 1992). Grammar rules guide how words are combined to communicate information. Grammar includes *morphology* and *syntax*. Morphology focuses on the structure within the word, and allows for the creation of complex words and phrases. For example, many words can be made plural by adding "s" to the end of a word (e.g., bird and birds). *Morphemes* are the smallest units of language that contain meaning. Some prefixes and suffixes of words contain their own meaning, such as "un" or "ing" in the words, "undo," "untie," or "doing," "tying." Young children frequently make mistakes in this area by applying a morphological rule in all instances (Bates et al., 1992). For example, a child might say, "I saw the deers" (plural /s/) or "I wented there" (past-tense /ed/). These rules are complex and numerous and children apply these rules as best as they can given the constraints of what they have already learned. *Syntax* governs our grammatical structures such as word order and phrasing. The meaning of "Mommy feeds Brother" is different than "Brother feeds Mommy." Infants show recognition of word order changes (Karmiloff & Karmiloff-Smith, 2001), and eventually learn to express word order differently to vary their message. A child may say, "Mommy phone" to simply indicate that the phone belongs to mom, or may say, "Phone Mommy" to indicate the phone is lighting up or ringing. A father volunteering in a room of four-year-olds will find that he is universally addressed by his child's classmates as "Isaiah's dad." The use of the /s/ to indicate possession on the end of Isaiah is a morpheme. "The child's

understanding that the order of the two words is 'Isaiah's dad' as opposed to "dad Isaiah's" is a usage of syntax.

7.3c Semantics

Semantics is the study of meaning, including vocabulary (Bates et al., 1992). Semantics may focus on the significance of an individual word or the meaning of particular words in the context of an entire sentence. As an illustration, the word "friend" may be a noun, as in "I have a friend." Friend may also be a verb when speaking about social media, "I will friend you." The meanings have some similarities, representing a connection to another person, but the usage creates a difference in whether we are speaking about the actual person or speaking about the connection to the person. Semantics also include nonverbal aspects of words such as intonation and gestures. For example, "whatever" can be an innocuous answer denoting many possibilities, "What can I eat from the snack table?" "Whatever." In this case, it indicates that the child is welcome to eat anything from the table. With a change of pitch and emphasis and tone of voice, "whatever" can signal strong disapproval. "I didn't know I was not allowed to have that." "Whatever!" Vocabulary building is a crucial part of learning and understanding semantics. Infants will not comprehend everything that they hear in the early months and weeks, but they will notice the way that words are delivered and the corresponding content. Exposure to rich opportunities normalizes the use of the words introduced, which are of course, entirely contextual. For example, three-year-old Alyssa was given the choice between naptime with her bear and her blanket, or her book and her blanket. In response, she told her mother, "I want another 'ternative." Alyssa has learned that the vocabulary word, "alternative" is used to indicate a choice, and she can use the word "alternative" even when she cannot pronounce it. The variety of words that children are exposed

to, and how they are drawn into conversations, influences individual differences in the rates at which children learn words (Karmiloff & Karmiloff-Smith, 2001). The quantity and quality of opportunities matter deeply. All children are exposed to the language the adults around them choose for them, which is why it is important that early learning settings provide rich and varied opportunities for children to be exposed to word meanings and word usage.

7.3d Pragmatics

Pragmatics is the social or transactional use of language, including context of the conversation. It encompasses not just what we say, but how we say it and to whom (Bates et al, 1992). Pragmatics includes rules of courtesy, turn taking, and the practical aspect of communication. Knowing that you should answer a question when a question is asked, is an example of pragmatics. Another instance would be knowing that one should stay silent in particular situations or stay on topic during a conversation. Using different communicative styles that suit different language partners is a key component of pragmatics. One may greet a friend by saying, "Hey!" But, one greets a boss by saying, "Good morning." Pragmatics can also be non-verbal, such as in the use of eye contact. Children may learn at an early age that an appropriate greeting would be to kiss someone once on each cheek or to nod politely. These expectations include an understanding of culture and of conversational role. For example, a child may recognize over time that family members or others with a shared heritage should be greeted with the cheek-kiss greeting, but that someone outside of this would be greeted differently. Essentially, pragmatics includes the ability to predict and notice cues from the other person, including words, gestures, and non-verbal cues, and to react accordingly.

Two and a half year old Imani wandered over to the table, where snack was being prepared. She noticed orange goldfish-shaped crackers being poured out onto a paper napkin. She wrinkled her nose, shook her head and emphatically said, "I no like it: go-fish." She walked over to the teacher, put her hand on the teacher's arm, and protested, "I no like it: go-fish!" The teacher acknowledged Imani and said, "You do not like goldfish. We have pretzels too." Imani shouted, "Petzas! Petzas!" The teacher then replied, "I will give you pretzels."

Imani's manner of expression is dictated by her relationship with the teacher and the pragmatic conversational patterns that they have already established. When Imani placed her hand on the teacher's arm, she was signaling the importance of her message. The meaning of "Petzas" denotes a semantic understanding about what Imani wants. As you consider Imani's language exchange, how is phonology reflected in Imani's pronunciation? How is her understanding of grammar evident in her word choice and order?

7.4 Developmental Patterns of Language

Children acquire language at their own pace, mastering the components of language as they develop. The

entirety of their developmental journey is filled with cues that they give to and receive from others. Children's individual development has biological, environmental, and contextual influences. This voyage is profoundly different for each child based on their language experiences, which impart meaning to their attempts at communication. Even with individual differences, there are some predictable patterns. Language development occurs as children develop receptive and expressive language in ways that foster social communication, and there are identifiable stages or windows of growth.

7.4a Receptive Language

Receptive language can be defined as "how we receive information and understand words and their meaning" (Virginia Department of Education, 2021). For the purpose of this textbook, receptive language is the ability to understand information transmitted by others. This includes understanding the words or sentences one hears as well as the meaning of what is communicated through gestures or signs, or in written form. Receptive language implies comprehension of the material being received, and it develops prior to expressive language (Bloom & Lahey, 1978). We generally understand more words than we use. All humans have more receptive than productive vocabulary, whether using their home or a new language (Cleci-Murcia & Oshtain, 2001). Receptive language requires knowledge of the meaning of the gestures or words being communicated (McGuiness, 2005).

Children develop receptive language prior to expressive language.

There is some evidence that we do respond to sounds prenatally, indicating that receptive language begins before birth. Babies in utero may sometimes respond to a loud noise, suggesting that they can hear (Marno et al., 2016). In addition to sound, there is evidence that babies are learning patterns of speech and react in the womb by kicking or demonstrating elevated heart rate (Karmiloff & Karmiloff-Smith, 2001). This early exposure results in a preference for language or native tongue of the mother in a newborn (Marno et al, 2016). Babies show a change in their heart rate when a speaker uses their mother's native tongue compared to a speaker using a different language (Minai et al, 2017). Newborns even change their thumb-sucking rhythm and pattern in response to the language and the speakers they hear (Karmiloff & Karmiloff-Smith, 2001).

Parents engage infants in language that differs from other points in the life cycle. They speak to babies using high-pitched voices with exaggerated pronunciation and

movements (Koester & Lahti-Harper, 2010). This *child directed speech* is also referred to as *motherese* or *parentese*, although it is used by other adults besides parents. Hearing infants respond to child directed speech with greater alertness and exclamatory sounds. Parents who use sign language also demonstrate a form of child directed speech with exaggerated movements and facial expressions (Masataka, 1996). Child directed speech is purposeful, and demonstrates attentiveness toward the infant (Koester & Lahti-Harper, 2010), but it is impossible to truly say if it is occurring because the parent initiates or the child elicits the exaggerated response. Either way, it is clear that there is something innate about our desire and capacity for connection which is reinforced in our early communication attempts. In other words, we bring our preadapted language capacity into the world, and the environment in turn shapes our development in these areas.

During infancy the child amasses an understanding of the sounds required for the language they are exposed to. Children are born with the capacity to produce and distinguish the sounds required for all languages, though they prefer their home language (Marno et al, 2016). Within one year, their brains begin to strengthen the connections they need to support their home language, and prune away or disuse the connections that do not help them meet their communicative goals. By 10 months of age, their ability to distinguish among sounds that are not in their home language has diminished (Conboy & Kuhl, 2011), though this loss does not occur in their native tongue. This process of distinguishing the sounds of one's native language strengthens the ability to learn language overall (Kuhl et al, 2005). Receptive language is developmental, and benchmark timeframes overlap each other as seen in the tables below.

Table 7.1 "Developmental Progression: Receptive Language"

Developmental Progression: Receptive Language

Developmental Progression	CLLD1.2 Using Vocabulary and Nonverbal Cues to Communicate
Early Infancy 0-8 months	• Responds to speaker by turning head or shifting eye gaze (CLLD1.1a) • Responds to tone or voice changes (CLLD1.1b) • Directs attention to sounds or object pointed at/to (CLLD1.1c) • Responds by looking when name is called (CLLD1.1d)
Later Infancy 6-14 months	• Follows simple requests paired with gestures (CLLD1.1e) • Begins to respond through sounds or gestures to others' questions (CLLD1.1f) • Makes different sounds to get attention (CLLD1.1g) • Understands and responds to simple commands and gestures (e.g., shared eye gaze/contact; may be influenced by cultural expectations) (CLLD1.1h) • Recognizes common objects when named (e.g., cup) (CLLD1.1i) • Begins to show understanding of approximately 50 words (CLLD1.1j)

Early Toddler 12-24 Months	• Uses sounds or nonverbal cues to respond to oral reading (CLLD1.1k) • Responds to simple requests (CLLD1.1l) • Identifies familiar people, animals, and objects (CLLD1.1m) • Begins to understand nouns (CLLD1.1n) • Begins to understand action words (e.g., hop, jump, press, go, stop) (CLLD1.1o) • Completes a task in response to a request (e.g., pick up your cup, go find your coat) (CLLD1.1p) • Identifies familiar people, animals, and objects (using gestures, words, or sounds) (CLLD1.1q) • Begins to recognize some body parts (CLLD1.1r) • Understands and responds to some pronouns (mine, you, me) (CLLD1.1s)
Later Toddler 22-36 Months	• Listens to and attends to spoken language and read-aloud texts (CLLD1.1t) • Follows simple and short directions for routine practices (CLLD1.1u) • Understands and responds to several hundred words or more (CLLD1.1v) • Understands and responds to basic attribute word differences such as personal (I/me/you/it) and possessive (my and mine) pronouns (CLLD1.1)

Early Preschool 34-48 Months	• Demonstrates understanding by answering questions (CLLD1.1x) • Follows two-step unrelated directions (CLLD1.1y) • Understands and responds to spatial concepts (e.g., in/out, under, front, behind) (CLLD1.1z)
Later Preschool 44-60 Months	• Answers questions and adds comments relevant to the topic (CLLD1.1aa) • Begins to demonstrate understanding of implied messages based on speaker's tone and/or gestures (e.g., finger on lip and saying "shhhh" means be quiet) (CLLD1.1ab) • Understands and responds to words for descriptive concepts (e.g., hard, square) (CLLD1.1ac) • Follows 2-3 step related directions and some new directions related to familiar and daily routines (CLLD1.1ad) • Demonstrates understanding of communication that includes a variety of complex sentences related to familiar stories, learning activities, and events (e.g., After Clifford the dog came home, he played with Emily Elizabeth.) (CLLD1.1ae)

Table 7.1 is from Virginia's Early Learning & Development Standards (ELDS): Birth-Five Learning Guidelines. It is used with permission of the creators and is not an open education resource covered by a Creative Commons License.

7.4b Productive or Expressive Language

Productive or expressive language is how we use vocabulary to describe objects, actions, and events. In this textbook, expressive language includes the language we produce to communicate our meaning and messages to others. This can occur through the use of verbal or non-verbal sounds, gestures, words, or written language. Expressive language and productive language are interchangeable terms that imply that the child is expressing or producing language for the purpose of having their intent understood. Expressive language develops later than receptive language (Celci-Murcia & Oshtain, 2001) and one's expressive or productive vocabulary is less than receptive vocabulary. As Celci-Murcia & Oshtain (2001) point out, expressive language usage implies receptive language mastery, but the reverse is not necessarily true. Infants show recognition of common daily words long before they produce their own first words. Children turn their head at hearing their own name before they can say it, and they will eagerly clasp and unclasp their hands upon hearing that they are about to eat a preferred familiar food.

7.4b1 Preverbal stages of language development. Language development occurs along a trajectory that begins with preverbal expression. Productive/expressive language evolves through stages that move from early sounds to word formation. Stark (1986) created a framework for describing expressive language, outlined in the table below.

Table 7.2 "Stark's Five-Stage Framework"

Stark's Five-Stage Framework

Stage	Stage Name	Age of Onset	Characteristics
Stage 1	Reflexive crying and vegetative sounds	At birth	• Crying • Sneezing • Burping
Stage 2	Cooking and laughter	6-8 weeks	• Noises
Stage 3	Vocal play	Between 17 and 30 weeks	• Consonant sounds from front of mouth such as muh, puh, nuh, buh, duh, • Some presence of vowel sounds • Noises with mouth such as blowing raspberries or clicking the tongue
Stage 4	Canonical/ reduplicative	7-9 months	• Syllables in consonant-vowel combinations (ma-ma-ma)
Stage 5	Non-reduplicative babbling	10 months	• Various consonant-vowel combinations • Takes on rhythm and pitch of conversation

Table 7.2 is based on Stark R. E. (1986). Prespeech segmental

*feature development. In Studies in Language Acquisition,
Fletcher P, Garman M (eds). Cambridge University
Press:149–173.*

Our first vocalizations are cries, beginning at birth, and reflect our preverbal language production. While it may begin as an instinct, these early cries let a caregiver know that a baby is distressed and requires care. This certainly is an early form of communication. Over time, children add other types of sounds to their collection whether accidental, such as a sneeze, or intentional such as a grunt. The first stage *reflexive crying and vegetative sounds*, includes vocal cord vibrations, burping, and blowing, and other sounds made accidentally or on purpose (Stark, 1986).

The second stage begins between 6 and 8 weeks and includes *cooing and laughter*. Children in this stage sound a bit like owls as they repeat these vowel sounds over and over (Menn & Stoel-Gammon, 2005). During this stage, children begin to laugh and signal their pleasure through use of the social smile that emerges sometime between 4 and 8 weeks.

The third stage, *vocal play*, emerges when children are between 17 and 30 weeks old. In vocal play children make vowel sounds and other sounds including consonants or friction sounds, such as by blowing raspberries or clicking their tongue. In this stage, children also add consonant sounds to their cooing, called *babbling* (Fagan, 2015). These preliminary attempts, called *marginal babbling*, see children producing some consonants with vowel sounds, but without true syllables. A child may produce consonants at the front of the mouth, such as "buh", but might not necessarily produce the vowel sound in a clearly distinguishable way.

The fourth stage, *canonical* or *reduplicative babbling* emerges when children are between 7 and 9 months old, and is distinguished from the previous stage by distinct syllable sounds. Babbling becomes more complex over time, taking on closer approximations of words, and the rhythms and pitches

of the home language (Lipkind et al, 2013). This more complex version of babbling is called *variegated babbling* (Gratier, et al, 2015) or *canonical babbling* (Vihman & Greenlee, 1987).

The fifth stage, *nonreduplicative babbling* is the production of sounds that sound very much like language, even if the words do not match. Children use distinctive consonant combinations, and the rhythm and pitch of the language sounds like speech. In addition, parents and children engage in communicative exchanges called *protoconversation* (Gratier, et al, 2015). Protoconversation occurs when the baby coos or babbles and the parent responds to the baby. Even though the conversation may not communicate a particular meaning, or could appear to be nonsensical, it is actually very helpful as children are hearing language sounds, learning about conversational turn taking, and learning that someone will listen to them.

7.4b2 Holophrases/single words. Holophrases/single words appear as children move from babbling to producing more organized and familiar sounds. The sounds that children use for babbling, may be sounds that they hear in language and can mimic, but may also represent their first words (Menn & Stoel-Gammon, 2005). This may occur even if it is hard to recognize the word from an adult perspective. Examples of this may be a sibling's name that is hard to pronounce such as "La-la" for "Greta" or "Go" for the more difficult to pronounce "John." In addition, a child may use a word to denote a whole phrase or intention they are meaning to communicate. For example, "Fue-da" (an approximation of "afuera" which means "outside" in Spanish) may communicate that the child wants to go outside. In a seminal study of parents and children from three cities, Bates et al, (1994), project that children may utter their first word as early as eight months, increasing to a vocabulary of approximately 10 words at the end of the first year, and 312 words by the time they are at the end of the second year. Productive language includes signs and gestures,

and as with receptive language development, has a trajectory that allows for individual differences.

There are substantial individual differences in language development over time. Some children show evenly distributed growth in vocabulary, while other children exhibit a vocabulary "burst" (Bates et al, 1992). Just as physical development has a range of normativity (e.g., walking between 10 and 16 months) language development also has ranges for demonstrating communication skills, as outlined in the chart below.

   7.4b3 Two–word phrases. Two-word phrases emerge as children master single words, then start to put them together in combination, "Me Cookie!" The developmental range for this is approximately 14 to 24 months with 20 months reported as the mean age (Bates, et al, 1992). There is a strong relationship between the development of words and word combinations, however there are variations in how children combine words to use language. In previous research, approximately 20% of children produced combinations of words with vocabularies under 50 words, while another 15% of children were not producing any word combinations even though their vocabularies were between 100 and 300 words (Bates, et al, 1992). Children typically add words to the two word combinations in phrases that first appear without grammar elements (Fenson et al, 1994). For example, when Imani said, "I no like it: go-fish (goldfish)," this demonstrates how a child uses short phrases to communicate their ideas without following grammatical rules.

Table 7.3 "Expressive Language"

Expressive Language

Developmental Progression	CLLD1.2 Using Vocabulary and Nonverbal Cues to Communicate
Early Infancy 0-8 months	• Uses sound, inflection, and gestures to communicate needs, desires, or emotions (CLLD1.2a) • Cries, coos, babbles, and makes other sounds (CLLD1.2b) • Reaches and points to communicate (CLLD1.2c)
Later Infancy 6-14 months	• Imitates actions of others as nonverbal communication (CLLD1.2d) • Makes vocal or non-vocal protests/demands (CLLD1.2e) • Vocalizes or gestures (e.g., pointing or using sign language) to communicate or to direct adult attention (CLLD1.2f) • Participates and initiates communication with family members or familiar others by using consistent sounds, gestures, and some words CLLD1.2g)

Early Toddler 12-24 Months	• Repeats words heard in conversations (CLLD1.2h) • Makes simple one-word requests such as saying or signing "milk' or "leche" when asking for a drink (CLLD1.2i) • Uses vocabulary for familiar items and events (e.g., hat, ball) (CLLD1.2j) • Begins to combine words, verbally or through signing (e.g., making requests through two- and multiword use/utterances such as "eat- or comer- 'nana'/banana") (CLLD1.2k)
Later Toddler 22-36 Months	• Asks short questions and requests clarifications (CLLD1.2l) • Speaks in or signs short sentences, and some expanded sentences, and is understood by familiar peers or adults most of the time (CLLD1.2m) • Begins to use more diverse types of words, such as color and quantity words (all, some, more, and including numbers) (CLLD1.2n)

Early Preschool 34-48 Months	• Begins to use complex sentences and ask simple questions (e.g., "After the gingerbread man ran, he swam on the fox's back."; "What happened to the gingerbread man?") (CLLD1.2o) • Answers questions from unfamiliar people including some open-ended questions (CLLD1.2p) • Uses adjectives to describe people, objects, or environments (CLLD1.2q) • Begins to use prepositions (e.g., in, on) (CLLD1.2r)
Later Preschool 44-60 Months	• Uses age-appropriate grammar in conversations and increasingly complex phrases and sentences (e.g., uses irregular past tense verbs such as came, ran, fell, broke, went, told, did) (CLLD1.2s) • Answers open-ended questions comfortably (CLLD1.2t) • Retells stories and events in sequence with multiple details (e.g., retells The Three Bears noting three chairs, three beds, etc.) (CLLD1.2u)

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7.4c Social Language

Language cannot be considered outside of its social role as the purpose of language is to understand and be understood. This carries with it the weight of expectations, hopes, needs, and wishes. How we use sounds, gestures, and actions to communicate are social in nature. Conversations after all, must eventually have conversational partners. Vygotsky emphasized the transactional nature of language as he considered the influence of the social world on our cognitive development. Vygotsky emphasized that language was a tool for learning, rather than merely a reflection of what the child knows (1986). In fact, the conversational style of those nearest the child influences their language development as they mimic those around them. Adult behaviors such as expanding children's utterances, and recasting and commenting on these utterances, is helpful for growth. Parents also differ in their conversational style, and so do siblings. Social language indicators include things like responding and turn-taking, or other signs of pragmatic language. Children's language develops when they have experiences with conversational partners who engage with them and nurture their growth.

Table 7.4 "Learning and Engaging in Conversational Interactions"

Learning and Engaging in Conversational Interactions

Developmental Progression	CLLD1.3 Learning and Engaging in Conversational Interactions
Early Infancy 0-8 months	• Responds and engages with an adult or older peer (CLLD1.3a) • Reacts to facial cues and eye contact (CLLD1.3b) • Engages by babbling (CLLD1.3c)
Later Infancy 6-14 months	• Takes turns in "conversation" or vocal play with adults (CLLD1.3d) • Turns, smiles, and begins to speak when name is spoken (CLLD1.3e) • Begins to follow adult pointing or gaze to establish joint attention (e.g. looks across the room when adult points or gazes) (CLLD1.3f)
Early Toddler 12-24 Months	• Responds with facial expressions, vocalizations, and/or gestures to engage in conversation with others (CLLD1.3g)
Later Toddler 22-36 Months	• Uses simple verbal responses and nonverbal gestures (CLLD1.3h) • Uses words, gestures, signs, and phrases to converse with others (CLLD1.3i) • Begins to ask and respond to questions (CLLD1.3j)

Early Preschool 34-48 Months	• Continues a conversation through several exchanges with or without adult help (CLLD1.3k) • Alternates between speaker/listener roles (CLLD1.3l) • Asks and responds to questions (CLLD1.3m)
Later Preschool 44-60 Months	• Begins to match language to contexts (e.g., voice volume, inflection/rise and fall of voice in speaking, and parting/greeting rituals) (CLLD1.3n) • Engages in multiple back-and-forth conversations with adults in ways that can be goal directed (such as solving problems) (CLLD1.3o) • Asks and responds to questions with accurate information (CLLD1.4p)

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7.5 Language Differences in Children

Developmental language progression tables show typical patterns of language acquisition. However, many children's language abilities develop according to different timelines. Common areas of language differences might include children who are multilingual learners, children who are deaf or hard of hearing, and children who have autism.

Some children may exhibit language delays or speech delays and show marked differences in how and when they communicate. Understanding the typical developmental patterns allows educators to recognize when additional intervention service providers may need to be engaged. While early childhood teachers should not be expected to diagnose language delays, familiarity with language development does help teachers to determine when to suggest a referral for an evaluation and how to contextualize children's language attempts and proficiency.

7.5a Children Who Are Multilingual Learners

Multilingual children learn to think in more than one language.

Children who begin learning more than one language prior to the age of five are defined as dual language learners (McManis, 2012). This text uses the term multilingual learners because it is more inclusive and recognizes that some children

may speak more than two languages across their home, school, and community environments. Some children are exposed to more than one language from birth, and others are introduced to a new language upon entry to an early learning setting (Castro, Garcia, & Marcos, 2013; Genessee, 2010). English Language Learner is another term used to describe a child who is immersed in English at formal school entry or later and whose home language is not English (Halle et al, 2012). In other words, when the exposure to a different language occurs during the preschool years and younger, we would define them as multilingual learners. Once they enter the K-12 education system, they may be identified as English Language Learners. Recognizing that some children will come to classroom contexts with more than one language is important because when children are learning more than one language, their trajectory of development differs from that of monolingual children.

7.5a1 Receptive language in multilingual children. Young children have a pre-wired or innate capability of learning more than one language from birth, and young children may become proficient in more than one language if multiple language exposure occurs in quantity, and with quality (Espinosa, 2013). Infants who are bilingual develop two separate but connected linguistic systems (Conboy, 2006). Because bilingual children must develop neural pathways and connections that are different from monolingual children, their cognitive development will also look different from that of monolingual children. Research demonstrates that acquiring multiple languages influences cognitive and linguistic learning mechanisms (Espinosa, 2013) and results in advantages that are evident in cognitive development (Bialystok, 2009).

7.5a2 Productive/expressive language learning in multilingual children. As children enter new language environments or negotiate multiple languages, educators may notice differences in expressive language. Listening and

comprehension tend to develop first. Educators may notice a child appears reticent to engage verbally in a new language environment preferring to silently observe and listen to their peers and educators talking around them. Frequently referred to as the *silent period,* it is an important learning space for children as they are internalizing the common phonological and grammatical patterns of the new language. During this time, a child's expressive language may seem to be lagging behind, particularly at school, and even at home. But, it is important to remember children are using this time to develop their vocabulary across languages. The younger a child is, the longer the silent period might last, thus it is commonly observed in early learning settings (American Speech, Language and Hearing Association n.d.).

While multilingual children may present differently than monolingual children in terms of literacy development, it is important to consider their whole language context; failure to do so might result in an early childhood educator interpreting perceived differences as a language delay (Espinosa, 2013). For example, multilingual children may appear to have smaller vocabularies if only one language is assessed. However, when educators evaluate a child's combined vocabulary knowledge across language contexts, the true depth of their language knowledge is recognized. Similarly, multilingual children may take a little longer to articulate their ideas when speaking because the child is working to determine which language to use in the current situation. The process multilingual children use to move from language to language is called *code switching* and it is an additional processing task for children (Castro, 2013). The additional cognitive challenge of moving between two languages is positively associated with executive function and cognitive flexibility (Espinosa, 2013). Therefore, it is important for educators to allow children who speak multiple languages more time to communicate their ideas and provide additional

wait time when completing word retrieval vocabulary assessments (Espinosa, 2013).

In addition to code switching, some children might also blend the languages in a process called *code mixing* (Peterson, 1988). A child may start out speaking one language and switch to the other or insert vocabulary from one language into a sentence that begins with the other language. For example, a child may say, "Quiero cookie" to indicate the desire for a cookie instead of completing the entire phrase in English, or the entire phrase in Spanish. Parents, teachers, or other adults may perceive code mixing as evidence of a delay or a problem (McManis, 2012). However, children who are code mixing sometimes do so within a context where they might be expected to be understood. A child who says, "more leche" can reasonably anticipate that adults will discern the desire for milk. Even when vocabulary words are inserted, children retain the larger set of language rules for each of their languages internally (McManis, 2012). Thus, code mixing should be an indicator that children are still building vocabulary and progressing with their language development while creating their internal maps for each language.

Young children are in an ideal window, or sensitive period, for mastering the functions and structures of language (Conboy & Kuhl, 2011). While there may be differences in how quickly children who speak multiple languages communicate, there are no apparent differences between multilingual and monolingual children's phonological awareness or decoding skills (Espinosa, 2013). The same is true for the developmental window of first word occurrences. The early language skill development of multilingual children, including semantics, syntax, phonological awareness, and morphology, provide a child with the ability to think about their language understanding. Moreover, the ability to both comprehend and think about language will be applied to both languages (Lopez & Greenfield, 2004).

The long-term gains for multiple languages are compelling—they are evident in cognition and culture and may have economic implications for the child later on (Bialystok, 2009). Some teachers may worry that if a child is not speaking English now, they will have difficulty with English later on. In fact, children do eventually learn English. Learning more than one language does not ultimately hamper the ability to learn English or to perform well on academic tasks when home and school languages are supported (Barnett et al, 2007). Children who are English Language learners keep pace or surpass native English speakers if they are proficient in English by Kindergarten (Halle et al, 2012). Therefore, allowing children to communicate across languages is a valuable practice for educators to encourage.

Pause and Consider: Pumpkin, Pumpkin

Ms. Katrina held 22-month-old Sebastian on her lap, reading to him during the quiet morning in her two-year-old classroom. She pointed to the pictures in the board book and said, "pumpkin." Sebastian looked back at her with shining eyes and pointed to the picture and smiled. He did not reply. Repeatedly through the book, Katrina pointed out pumpkins and prompted Sebastian to say, "Pumpkin." Not only was Sebastian unwilling to repeat the word, "pumpkin," while book-reading, but Ms. Katrina noticed that Sebastian had very little to say at school. Ms. Katrina asked the family if Sebastian talked at home, and mom immediately expressed her worry. Mom said that at

home he pointed to items and would say, "Mama" or "Daddy," but he was generally very quiet. Mom indicated that she was worried Sebastian would "not learn English." The parents and Katrina worked together to refer Sebastian for an evaluation for early intervention services to determine if there was a language delay. Later that same week, the classroom went to a pumpkin farm for a field trip. Sebastian walked over to a very large pumpkin in the front and loudly said, "Cabasasa," an approximation of the Spanish word for pumpkin, "calabaza." He then started to giggle and put his hands on many of the large and small pumpkins right around him, each time calling out "Cabasasa!"

What assessments could the teacher make about Sebastian's language development? What questions could the teacher ask the family that would have provided more helpful information? What assumptions should the teacher avoid? What should the teacher's orientation be to this student's needs?

7.5b Children who are Deaf or Hard of Hearing

Oral language and listening are dependent on the auditory system, and when there is hearing loss, language development is altered. Hearing loss varies from complete deafness to partial hearing. When hearing loss ranges from severe to profound, there are substantial barriers to oral language development (de Oliveira Sobreira, 2015). This is particularly true in children who lose hearing soon after birth or are deaf from birth (de Oliveira Sobreira, 2015). Deafness

and hearing impairments do not prevent a child from communicating. Early diagnosis and intervention is important, so that children may experience a full range of possibilities for developing language, external to speech and hearing.

7.5b1 Receptive language in children who are deaf and hard of hearing. Acquisition of language for children who use sign language has structural similarities to the development of oral language in hearing children (Schlesinger & Meadow, 1972). In fact, children who learn sign language demonstrate an onset of *first sign* earlier than hearing children demonstrate spoken words (Schlesinger, 1978). Bonvillian and colleagues (1983) found that deaf children in their study showed earlier attainment of additional milestones. Early first sign production often occurs with the first word at approximately 8.5 months with a range of 5.5 months to 12 months. Children acquire sign language vocabulary quickly, demonstrating an average size of 10 signs at the age of 1 year, and 50 words at 18 months (Bonvillian et al., 1983). The average for putting two signs together is 17 months with a range of 12.5 to 22 months. This is consistent with what we know about young children's capacity to use sign language. Schlesinger and Meadow (1972) suggest that all children would learn to sign before learning to speak, if exposed to sign language.

The desire and effort to communicate is universal; parents, family members, and other adults wish to engage in social language transactions with children (Marschark & Waters, 2008). Parent interaction has some features that are the same with all children. Deaf parents demonstrate a version of child-directed speech, emphasizing their signed communication with infants using large movements, incorporating repetition, and holding signs longer than usual (Koester & Lahti-Harper, 2010). This is similar to how hearing parents use exaggerated vocal input, changing pitch, and melodic contours when they engage in child-directed speech (Koester & Lahti-Harper, 2010). Deaf infants show greater

attention and responsiveness to infant-directed signs (Masataka, 1996). Whether parents are communicating vocally or through sign language with their babies, they are doing so in a way that is more dramatic and exclamatory, accompanied by exaggerated facial gestures. For all children, gestures are among the first experiences of receptive and expressive language, and these are precursors to developing more complex language through speech or sign language (Volterra et al., 2005).

7.5b2 Productive/expressive language in children who are deaf and hard of hearing. Infants and toddlers who are deaf or hard of hearing engage in symbolic play as part of their expressive language experiences and in doing so, practice using gestures and sometimes oral sounds or words. The development of gestures and the numbers of words and phrases understood or produced is related to specific attainments in symbolic play (Yoshinaga-Itako et al., 1998). Children who demonstrate higher expressive language levels make more attempts at utterances, words, and word combinations. All manifestations of expressive language, including spoken language and signed output, are strong predictors of speech outcome, suggesting ample opportunities for practice supports the development of speech skills (Yoshinaga-Itako et al., 2020). Therefore, opportunities to engage in social play strengthen productive language with children who are deaf or hard of hearing.

Some children use sign language to communicate.

Speech ability is impacted by the severity of hearing loss (de Oliveria Sobreira et al., 2015). Some children are hard of hearing with mild to severe hearing loss, and some children are deaf with profound hearing loss, or have both hearing and visual loss. All of these possibilities impact the trajectory of how the child learns to communicate and how educators and families structure learning opportunities for children. Children who have early cochlear implants may have improved auditory-linguistic abilities (de Oliveira Sobreira et al., 2015). However, cochlear implants are not always sufficient to solve hearing loss, and results are variable (Peterson et al., 2010). The speech ability of children with mild to severe hearing loss becomes more similar as children reach adolescence, but the speech ability of children with profound hearing loss is less well developed. A child's success may also be impacted by the frequency of signs along with speech, coupled with one's level of hearing (Marschark & Knoors, 2012, Yishinaga-Itano, 1998). Approaches for communication may include sign language, tactile sign language, cued speech, hearing aids, and cochlear implants. Decisions about which strategies to use are determined by the child's needs, the family preferences, and the availability of services or early learning settings.

Pause and Consider: Rainsticks and Picture Cards

It is six weeks into the school year, and Ms. Noora has noticed that 3-year-old Deon tends to be the last child to leave centers and to join the group for activities. Deon does not usually sing along in circle time, though he does the hand motions and joins in some words in

the chorus. Deon does respond to language, but it is inconsistent. Sometimes he seems to be in his own world instead of responding, until after the other children have already done so. Ms. Noora had thought that this might be a temperamental or developmental trait of Deon's. However, this morning, Deon's parents told Ms. Noora that they are worried about his hearing and are having him evaluated. Ms. Noora thinks about her routines this year. For transitions, she has mainly been using short special songs to indicate what is coming next and sometimes a rain stick. If Deon is hard of hearing, this might not have been as useful as a picture card or puppet. Ms. Noora immediately starts to pay attention to Deon's patterns and observes that he looks at other children when there is a transition. Later, Ms. Noora decides to take the children outside to play during a break in the rain. As Ms. Noora begins singing the recess song, she holds up the picture card from the daily schedule and waves it. She notices that Deon looks at the card and immediately goes to grab his coat.

Accessibility in our classrooms means that we use strategies to include all children. What are some transition routines that can capture children who have language differences?

7.5c Children with Autism

The number of children diagnosed with autism spectrum disorder has steadily increased over the last few decades. One in every 54 children is identified with autism spectrum

disorders (Maenner et al., 2020). Autism, or Autism Spectrum Disorder (ASD), refers to a broad range of conditions, usually evident before age 3, causing challenges in a child's speaking or nonverbal communication (IDEA, 2004; 34 C.F.R. § 300.8 [c] [1]). ASD is also characterized by difficulty with social skills and changes in routines and unusual responses to sensory experiences. Autism is considered to be the fastest-growing childhood disorder (Gonzalez et al., 2017). The median age at which a child is first evaluated ranges from 29 months to 46 months (Maenner et al., 2020) and often results from questions about the child's language development. Language deficits are often an early impetus for parents to seek answers and begin the process of evaluation. Children with autism display a wide range of language performances. Some children may be considered non-verbal or use limited verbal speech. While other children with autism may follow typical language patterns. Additionally, some children have speech, but might have trouble with specific forms of language, such as pragmatic cues. Language development in children with autism, like all children, is not fixed. A child who has no speech may later develop speech (Boutot, 2016). All children can grow and develop in their ability to communicate with supportive instruction and early intervention.

  7.5c1 Receptive language in children who have autism. Receptive language may be affected in young children with ASD. For example, toddlers with autism may have difficulty hearing words when the referent (person or object) is absent (Fitch et al., 2018). In other words, referring to a dog if the dog is not actually there, might be a receptive language task that could be harder for a very young child who has autism. Learning semantics, the proper usage of language in varying social settings, is a difficult task for all young children. It requires a utilization of receptive language that is interpretive. For example, a child in an examination setting was given a set of dolls and told by the adult, "We are going to play with my

family." The child was perplexed at how the adult's family could be a set of dolls (Boutot & Myles, 2017). Very young children with ASD may have trouble incorporating new information on the basis of verbal cues alone, without visual support (Fitch, 2018). However, with opportunity for repetition of verbal input and a low-demand task, young toddlers with ASD can be successful in acquiring newer mental representations (Fitch, 2018). It is valuable to remember semantics can be taught and learned through intentional opportunities and experiences.

Children with autism may also have difficulty interpreting components of nonverbal communication, such as facial expressions and proximity (Boutot & Myles, 2017), and might need coaching or instruction so that they acquire knowledge of social reactions. Children with autism might also find it more challenging to process language when immersed in settings with distracting visual and auditory stimuli (Marco et al., 2011). It is helpful to consider the environment, especially if you are trying to help the child with an area of language. Generally speaking, the social-communication impairments associated with ASD are particularly impactful for the development of receptive language (Reinhartsen et al., 2018). Teachers need to pursue multiple approaches in order to make sure that a child with ASD is understanding what is being communicated.

7.5b2 Productive/expressive language in children who have autism. Many diagnostic tools focus on screening for expressive language. For example, eye contact and pointing are important indicators of productive language or potential. Other markers include orienting to name, imitation, social smiling, and social interest (Zwaigenbaum et al., 2005). While orienting to name is a receptive skill, imitation, smiling, interest, and name orientation are productive expressions of language. Children who are diagnosed with ASD by 24 months tend to display fewer phrases and gestures by 12 months, and diagnosis of autism often occurs between 12 and 24 months

(Barbaro & Dissanayake, 2012). Parents and other adults expect to see children become more communicative and start using speech between the first and second year. Some examples of expected productive language include shaking and nodding the head in response to a question or pointing to communicate that they want something. Children may also hold up their arms to be picked up, which is an expressive language gesture. In addition, we expect to see transactional language such as giving items to another person and showing or demonstrating something they find interesting (Mitchell et al., 2006).

Children with autism sometimes exhibit productive language called *echolalia* where a child repeats or echoes what they have heard. You might ask a child if they would like to go outside and instead of replying with a yes or no, the child may repeat "outside, outside." Echolalia is sometimes present with typically developing toddlers and becomes more visible in children with autism as they age. Additionally, pragmatics is an area that is of particular interest when working with children with autism. When a child has other functional language areas mastered, such as word meaning and order and pronunciation, they may still struggle with understanding the rules and social components associated with language (Boutot & Myles, 2017). Pragmatics dictates that it might be appropriate after naptime at a family home child care to say, "okay, up." But at home, a child has the freedom to say, "I want to sleep!" Children with autism may struggle with these contextual distinctions, which vary based on the demands and structure of the social environment (Boutot & Myles, 2017). In early childhood, all children seem to struggle with pragmatics to varying degrees, thus difficulty with pragmatics would be more pronounced as the child with autism ages.

Pause and Consider: Circle Time

Ms. Tina called the students over to circle time in her young fives classroom. At circle time, the children start with a hello song where every child says their name. This leads into the next song for the week, which includes clapping and movements to practice rhyming words. During the circle time experience, Andrew walks around the room. He is verbal, but he does not say his name when it is his turn, and he does not join in any part of circle time. Ms. Tina knows from interacting with him at other points of the day that Andrew does not like it when the room gets "loud."

The next group prompt gives every child the opportunity to think of a word that ends in the same way that the book emphasized. Should Ms. Tina call Andrew over to offer him a turn? Are there strategies she could use so that it would not seem so loud for Andrew that would still allow him to participate?

7.6 Strategies to Support and Promote Language Development

Because language is social, development is driven by the quantity and quality of interactions between a child and their adults. Sensitive care promotes healthy development of a child overall, but language is innately social. Communication between young children and adults includes eye-gaze, sounds and symbols, and often tactile sensations as a baby is held or a toddler clasps the knees of a seated adult. *Attunement*, or being aware and responsive to a child's needs, sends messages to the child about their worth and whether those needs will be

met. As children grow and begin using more words, they are constantly reaching out for our cues on their proficiency. The serve and return interchange is not only building language, it is building a social understanding, which then builds language.

Attunement to children's needs creates opportunities for language.

7.6a Eliciting Language Through Conversations and

Questions

Adult-child interactions give opportunities to observe, learn, and practice language skills. Even simple language conversations foster this growth. Consider the example of Imani's exchange with her teacher. She said, "I no like it: go-fish." Her teacher responded by acknowledging, "You do not like goldfish." This strategy, known as *expansion*, fills in missing words and provides a model of language rules. A similar strategy, *recasting*, fills in what is missing, while also extending the child's idea or changing the sentence structure. A child might exclaim, "Water, Cold!" The teacher may recast by asking a question, "Is the water cold?" Further recasting might cause the teacher to say, "You do not like this cold water on your hands!" With recasting, the child's initial utterance may be changed from a statement to a question, or ideas extended and lengthened. Expansion and recasting provide language models for children who are multilingual and engaging in code-mixing to communicate their ideas. For example, a child may say, "Quiero milk." The teacher may then respond by saying either "¿Quieres leche?" or "Would you like some milk?" Recasting provides a language model without overtly correcting the child. More importantly, it sends a message that the child is understood. These supportive interactions provide the cognitive stimulation, sensitivity, and responsiveness to help foster language (Hamre & Pianta, 2005) and support cognitive gains over time (Siraj & Asani, 2015).

The quality of the interaction is also a relevant component to consider. Interactions that emphasize close-ended or one-word responses reduce a child to answers that are brief and minimal (Pianta et al., 2012). "Did you go outside yesterday?" yields a shorter conversation than asking, "What did you do this weekend?" When children have opportunities to have longer back-and-forth conversations with open-ended questions, it naturally creates more opportunities for children

to practice their conversational skills and to expand their thoughts (Pianta et al., 2012; Scull, Paatsch, & Raba, 2013). This approach is not merely helpful for individual children in each conversation, but there is a positive impact on the quality of the classroom environment (Hamre & Pianta, 2005). Sustained conversations promote enhanced language and literacy practices in the classroom overall (Justice et al., 2008).

One way to promote extended conversation is to use a model of Shared Sustained Thinking (Siraj & Asani, 2015). In Shared Sustained Thinking adults intentionally start teacher-child dialogues designed to expand answers and keep children engaged in conversation. Supportive shared conversations include solving problems together, clarifying concepts, evaluating activities, and the conversation extends as parties are thinking about their own ideas and knowledge. Helpful strategies for fostering supportive shared conversations are outlined in the table below, with verbal examples and non-verbal examples proposed by Siraj-Blatchford (2015) and expanded by the authors of this textbook.

Chart 7.5 "Supporting Children's Sustained Shared Thinking."

Supporting Children's Sustained Shared Thinking

Strategy	Verbal Example	Non-Verbal
Tuning In	Greeting the child and listening	Body oriented toward child, bending over to near eye level to child
Showing Genuine Interest	Verbal affirmation	Maintaining eye contact, smiling, nodding
Respecting children's own decisions and choices by inviting children to elaborate	Saying things like, "I really want to know more about this."	Listening and engaging in the response
Re-capping	"So you think that…"	Drawing picture together or as a depiction that you understand the conversation
Offering the adult's own experience	I like to…	Sharing photos or pictures
Clarifying ideas	"So you think that this stone will melt if I boil it in water?"	Use facial gestures, such as a questioning expression
Suggesting	"Could we try doing it this way?"	Pointing to item while smiling
Reminding	"Don't forget that you said that this stone will melt if I boil it."	Tapping forgotten item
Using encouragement to further thinking	"You have really thought hard about where to put this door in the palace. Where will you put the windows?"	Give your brain a kiss (kiss hand and then touch hand to head)

Offering an alternative viewpoint	"Maybe Goldilocks wasn't naughty when she ate the porridge."	Showing another way to solve a problem (e.g., a different way of stacking blocks)
Speculating	"What do you think the three bears would do if Goldilocks knocked on their door and invited them to go on a picnic?"	Act out pretend play and dress up scenarios
Reciprocating	"Thank goodness that you were wearing boots when you jumped in those puddles! Look at my feet. They are soaking wet!"	Mirroring child's gestures Varied, animated facial expressions
Asking open-ended questions	"How did you...?" "Why does this...?" "What happens next...?" "What do you think...?" "I wonder what would happen if...?"	Using drawing for communication and indicating questions
Modeling thinking	"I have to think hard about what I will do this evening. I need to take my dog to the vet because he has a sore foot, take my library books back to the library, and buy some food for dinner tonight. But I won't have time to do all of these things."	Demonstrating thoughtful examination of items or drawings by pausing first

Chart 7.5 is based on Siraj-Blatchford, I. (2015). Quality Interactions in the Early Years Keynote Address at the TACTYC Annual Conference, Cardiff, 5 November – Birth to 8 Matters!

Seeking Seamlessness – Continuity? Integration? Creativity?"
[http://www.ta](http://www.tactyc.org.uk/pdfs/2005conf_siraj.pdf)*ctyc.org.uk/pdfs/2005conf_siraj.pdf* [Google Scholar]

7.6b Instructional Opportunities That Support Language Development

Dramatic play creates opportunities for children to engage with their peers and act out real life scenarios. Many early learning settings have dramatic play areas, including home living/kitchen, puppet stages, flannel sets, and temporary thematic spots, such as an apple orchard or mechanic's garage. These types of activities foster opportunities for children to practice dialogue, use different voices, and experiment with conversational rhythms. Teachers may or may not join in, but having a richness of materials available in the environment can help children to engage in discussions with one another.

Dramatic play helps children practice language skills.

The ability of children to discriminate sounds and perceive rhythm and rhyme is associated with early reading ability. Nursery rhymes are particularly effective. They are short verses, making them easily repeatable. Children's exposure to nursery rhymes is connected with spelling success in early grades (Dunst et al., 2011) and are particularly effective with English Language Learners (Prošić-Santovac, 2015). For

example, "Jack be nimble, Jack be quick, Jack jump over the candlestick!" is easier for children to master and repeat than a longer poem. Even short poems allow for practicing tone of voice, inflection, grammar, and figurative language. These early attempts help build a foundation for language development. Hearing the sounds at the beginnings and endings of words helps children explore connecting these sounds to letters and prepares children for early reading (Rasinki & Zimmerman, 2013). As teachers introduce poems of different styles, they create opportunities for the children to enhance their vocabulary knowledge and to engage with their peers in addition to enjoying and celebrating language.

7.6c Language Accessibility and Differentiated Supports

Assistive technology includes devices or services that help children with disabilities to engage in learning and social interactions (Lohmann et al., 2019). Common examples include sign language, picture communication boards, adapted books, and voice output communication devices (Lohmann et al., 2019; Skau & Cascella, 2006). Sign language provides a visual or tactile demonstration of spoken words and is used not only for children who are deaf or hard of hearing, but hearing children as well. A common strategy is to have parents and children learn 20 to 30 words that are useful for the child and their environments (Skau & Cascella, 2006). This approach allows children to be able to communicate and understand some of the most basic and fundamental concepts. In the same way, picture boards allow children to touch or point to words they hear or wish to say. These can be used at home or school and can be relatively easy to produce or reproduce by using computers and cardstock or poster boards. For example, a picture of clothing, toothbrush, breakfast, then a car can highlight the order of routine for a young child. This also allows

the possibility for the child to ask for or about a portion of the routine as it is occurring by pointing to that same board. Story and song boards create opportunities to point to pictures as a story or song is being shared. This generates space for a non-verbal child to respond, repeat, and participate fully in a classroom environment. Using a communication board might also be effective for a verbal child that is bothered by noise, as a child could wear earphones to manage the noise, and still participate by pointing to a board. It works best to include interesting textures or even real objects attached to the board (Skau & Cascella, 2006). As an example, an educator telling the story of *The Three Little Pigs* enhances children's understandings with the storyboard by affixing to the board a picture of a brick, a small stick, and a bit of straw or raffia. Teachers can also point to storyboards as an aided language simulation for all children by pointing to words and pictures to emphasize meaning while telling a story, "The first little pig built his house out of STRAW."

Vocal output devices produce pre-recorded messages when children press a button or otherwise trigger a word (Lohmann et al, 2019, Skau & Cascella, 2006). The child activates the device to answer questions, prompt others to action, or otherwise communicate. A vocal output device could be used in the classroom to record phrases or lines from poetry, story, or song. When the class joins in the story or song, the child with the vocal output device can then also join in.

Use of tablets and smartphones for assistive communication purposes has increased more recently as these items have become more readily available (Lohmann et al., 2019). Smart devices can easily be used in a classroom as a way of helping to create vocal output for a story. For example, classmates or teachers could record voices on the phone or tablet, "And I will huff and puff and blow your house down!" The child using the technology could play it at the cue when everyone joins in. The voice recording could be the child,

teacher, classmates, or even family members with some planning ahead. Use of smart technology for assistive communication is most effective when adults have positive beliefs about the use of these devices (Zajc et al., 2018). Similarly, teachers' use and comfort integrating assistive technologies develops as they gain more experiences using adaptive technologies within young learners .

Key Take-Aways

Children's language development depends on ample meaningful language experiences with peers and adults. These experiences allow children opportunities to express themselves and be understood. When educators and parents provide these opportunities they support children's language development. Understanding typical language trajectories allows educators to anticipate children's language needs and enrich language environments accordingly.

It is also important to understand differences in the developmental trajectories. Children who are English Language Learners might have some initial delays as they navigate a silent period of receptive language before becoming more expressive/productive. Home language retention and multilingualism results in cognitive gains and maintains important cultural ties. Children who are deaf and/or hard of hearing may have language delays depending on the severity of the hearing loss and the type and timing of intervention. All children with hearing loss benefit from social play

opportunities as this strengthens productive language. Children who have autism may struggle with receptive and expressive language. Nonverbal cues may be particularly difficult for a child to master. Early intervention is helpful, not only for language development itself, but for the social transactions that take place. Shared conversations help to elicit growth in listening, speaking, and nonverbal communication. Assisted technology can help to bridge the gap when children need communication support.

Intentional educators promote children's language development by attending to children's individual differences, remaining culturally responsive, providing context and environmental supports, and using adaptive technologies that enhance children's engagement. Children have a desire to communicate and a right to be understood. Language in its many forms allows this process to unfold.

Additional Resources

American Society for Deaf Children: https://deafchildren.org/parents-and-families/

American Speech-Language-Hearing Association: https://www.asha.org/

Autism Speaks: https://www.autismspeaks.org/

Bilingualism in the Early Years: What the Science Says: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6168212/

Center for Applied Linguistics: https://www.cal.org/

Chomsky's Universal Grammar: https://thebrain.mcgill.ca/flash/capsules/outil_rouge06.html

Colorín Colorado: https://www.cal.org/

Components of Language and Reading Instruction:https://nche.ed.gov/wp-content/uploads/2018/11/read_ch5.doc

Division for Early Childhood of the Council for Exceptional Children: https://www.dec-sped.org/ei-ecse-standards

Language in Brief: https://www.asha.org/practice-portal/clinical-topics/spoken-language-disorders/language-in-brief/

Multilingualism: https://www.zerotothree.org/resources/2095-multilingualism

National Center on Deaf Blindness: https://www.nationaldb.org/

National Association for Education of Young Children: https://www.naeyc.org/

National Professional Development on Autism Spectrum Disorder: https://autismpdc.fpg.unc.edu/evidence-based-practices

Virginia Cross-Sector Professional Development: http://vcpd.net/

Virginia's Early Learning and Development

Standards: https://www.doe.virginia.gov/early-childhood/curriculum/va-elds-birth-5.pdf

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8. Reading Development: Engaging Emergent Readers

"The fire of literacy is created by the emotional sparks between a child, a book, and the person reading. It isn't achieved by the book alone, nor by the child alone, nor by the adult who's reading aloud—it's the relationship winding between all three, bringing them together in easy harmony."

–Mem Fox, from *Reading Magic: Why Reading Aloud to Our Children Will Change Their Lives Forever.*

Opening Vignette: The Favorite Book

One morning a young 2-year-old named Adelyn was sitting with a favorite book from home, "Dora and the Rainy Day." Ms. Faith, Adelyn's home care provider, watched on as Adelyn flipped back and forth between the pages of the well-loved boardbook. She repeatedly

came back to a page in the beginning and pointed to the words and the pictures and said, "It's time to come inside now. It's raining." Then she would flip to the middle of the book and stop. Clearly mimicking the intonation of an adult who had read the book before, she said, "We are making hot chocolate...need to wait for the cookies to bake!" Then she moved to a page at the end of the book and pointed to the characters in the picture saying, "That's the mom...there's the dad....it's raining." Then she closed the book and announced, "THE END!"

Ms. Faith walked over to the child and commented on what a good job she did reading the book. Ms. Faith also asked Adelyn to show her some of the parts of the book, noting that this child was clearly showing signs of print awareness. For instance, she observed that Adelyn was holding the book right side up, she turned the pages from right to left (even though she skipped some), and she was able to use known words and concepts from the story in her retelling. It was clear to Ms. Faith that Adelyn was developing a sense for story structure and how to use pictures and words to understand text. And best of all, Adelyn was finding great joy and pleasure in rereading this book on her own.

8.1 Introduction

Watching a young child, like Adelyn in the opening vignette, begin to understand how reading works is such an exciting time for both families and early childhood educators. As has

been discussed in previous chapters of this textbook, there are many interwoven elements that create proficient readers and many things adults can do to support reading development. Through continuous exposure to a variety of text, repeated readings of favorite books, and conversations between adults and children about text, children like Adelyn learn that reading is ultimately about making meaning and communicating a message. Even though this particular child has not yet learned to read in the formal sense, she knows a lot about print and how books work. These emergent reading skills are critical to future reading success and an ability to ultimately "crack the code" and recognize that letters and symbols connect to sounds and meanings (Scarborough, 2002). Knowing that text conveys a message supports children's developing abilities to understand and eventually decode that message independently.

For some children, it might seem that reading starts to happen "like magic" but learning to read is not intuitive. This differs from how children acquire language. The human brain is wired for language and children naturally gain language skills as they develop (Chomsky, 1968; Geary, 1995; Snow, 1983). Some researchers refer to language as "biologically primary" because it is found across cultures and needed to help people survive (Geary, 1995). However, this is not the case for reading the printed word because what we read—our alphabetic script—is an invention, only available to humankind for the last 3,800 years (Dehaene, 2009). As a result, our brains have had to accommodate new pathways for translating the squiggles that are letters into the sounds of the spoken words they symbolize.

The seemingly simple task of reading is, in actuality, a complex feat. Reading skills require a complex interplay of various regions of the brain working together simultaneously (Wolf, 2007). Reading skills are considered "biologically secondary" because they do not develop without specific experiences and instruction (Sénéchal et al., 2001). Children

need intentional and explicit opportunities to learn skills and strategies to become proficient readers. In this chapter, we will use a Framework for Developing Emergent Literacy (Puranik & Lonigan, 2014), including conceptual knowledge, procedural knowledge, and generative knowledge, to unpack the complex elements of reading.

Figure 8.1 "Framework for Developing Emergent Literacy"
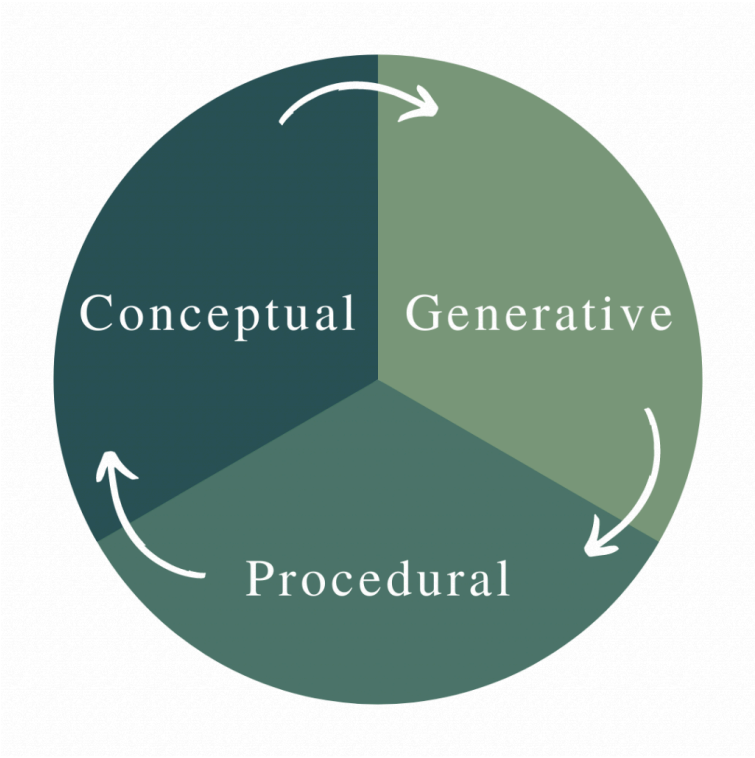
This framework was designed to explain the dimensions of emergent writing. But in this textbook, we will use the framework to parallel both the reading and writing processes. The first dimension, *conceptual knowledge*, will focus on the functions of reading, such as learning new

information, completing a task, or reading for enjoyment. The second dimension, *procedural knowledge*, will focus on the mechanics of reading, such as decoding, print orientation, and story structure. Lastly, the third dimension, *generative knowledge*, will focus on application of skills, such as understanding the author's meaning and applying information or ideas in the real world. Using the Framework for Developing Emergent Literacy, this chapter will answer the following questions:

How do young children develop an understanding that reading is about making meaning?

How do emergent readers progress on a continuum of development?

What can early childhood educators do to support emergent readers using effective instructional strategies and literacy assessments?

8.2 Reading is Making Meaning

Children at a very young age begin connecting print and other symbols to meaningful ideas. Anyone who has seen a child "read" a sign on the side of the road for their favorite restaurant or store has witnessed this process of making meaning. Children know that when they see the familiar sign, it is marking something meaningful and letting people know what they can find inside. The processes of "learning to read"

and "reading to learn" develop concurrently in an incremental and symbiotic fashion. A 3-year-old looking intently at a picture book with characters wearing hats is reading to learn about hats. At the same time, that toddler is hearing sounds /hat/ that match the symbols on the page. They are seeing and hearing it as a whole word, which helps build a foundation for learning to read. Conceptual knowledge about reading can and should happen well before formal reading instruction or the process of "learning to read" begins. Before children can independently read words on a page, they need to know that print conveys a message. This conceptual knowledge about the basic functions of reading is fostered by experiencing print in a variety of meaningful contexts.

Text and text features (e.g., charts, headings, and captions) in books work similarly to signs on the road. When children have guided and supportive experiences in text, they begin to make connections between elements of print and its meaning. Adelyn, in the opening vignette, could not read the words "cookies," "hot chocolate," and "raining" but she could point to the text and indicate that she understood that the words on the page talked about important elements of the story she had heard before. Likewise, children also understand that they can learn from print well before they can formally extract a message themselves. It is not uncommon to see young children locate resources that they know contain information they want or need. In early childhood classrooms, children will often bring a book to their teacher and ask them to read the part about their favorite animal. At home, children may ask a caregiver to read the next step of the recipe so they know what to add to the cake batter. These are all early markers that children are connecting reading with making meaning. There is no arbitrary line when children learn to read and then can learn from reading. When exposed to print and text messages, children are in a continual process of both learning

the skills needed to read and learning new information from text.

In this textbook, we are positioning early childhood teachers' first, and arguably primary, responsibility around reading instruction to be *fostering meaning-making experiences to ensure that children see reading not just as isolated skills, but as a process that ultimately shares a message*. Early childhood educators support students' conceptual knowledge about reading and help children understand the purpose of text when they (a) connect spoken words to print, (b) share various types of text, and (c) guide comprehension of text. Later in this chapter, we will discuss a variety of instructional strategies and assessments educators can use to build specific emergent literacy skills, but here we will discuss how to develop a conceptual understanding about print.

8.2a Connecting Speaking to Print

In Chapter 7, we discussed the critical role that oral language and vocabulary play in literacy development. Early childhood educators can build an understanding about reading by connecting children's language skills to print. This can be as simple as stating a student's name and then pointing to the name on a chart or having children say or echo read the letters that make up the special friend's name. Educators also show children how oral words are represented in print when children dictate captions that go with their illustrations or create collaborative morning messages about the day's events. Even if the children can't read all of the words being written, the educator is reinforcing that their words can be marked using symbols. Educators can also ask students to orally share their background knowledge on a topic and then turn to a written text to see what the author has to say about the topic. Ultimately, we want children to know that what we

think and say can be written down and what we write can later be read and discussed.

Adults can use words to note the child's description of their artwork to promote literacy.

8.2b Sharing Various Types of Text

Helping children see that text is part of our world and all around us is a big piece of the early childhood educator's role in reading development. Using environmental print, familiar signs, logos, and brands to show children examples of text they know can be a powerful learning experience. Educators can also intentionally choose a variety of books to share with children. Ensuring that children have access to various types of books and text, such as board books, cloth books, pop-up books, magazines, posters, labels, etc., helps children see the various forms that print can take. It is also critical that educators read daily to children from books of varying genres. Finding picture books that share engaging fictional stories is just as important as finding non-fiction

books about topics of interest. Reading poems and comic books as well as recipes, directions, and lists shows children that text shows up in a plethora of ways for different purposes.

8.2c Guiding Comprehension of Books

Children learn about text features when they share books with educators.

Children learn about text features when they share books with educators.

Once children have been immersed in text and see its prevalence all around them, they are ready to have guided discussions about understanding various types of books. Early childhood educators can begin thinking aloud about what they notice as a story unfolds and what they are wondering as new events and details emerge. Helping children develop an awareness of basic story structure (e.g., problem and solution; beginning, middle, and ending; setting and characters) primes

them for future independent reading and unlocks some of the mystery around storytelling. These opportunities for guiding comprehension and understanding of books support children's developing knowledge that reading is an active process. In order to understand the message, they need to engage with print in various ways. Similarly, educators can point out various text features of non-fiction text (such as photographs, captions, headings, charts, etc.) to show children that important information can be found in many places. Comprehending text is a continuous skill that deepens and matures throughout the reader's life, but the initial keys to understanding text can be nurtured from the earliest years.

8.3 How Emergent Readers Progress

Emergent literacy (defined in Chapter 1) acknowledges that literacy development is an emerging process that begins well before children demonstrate proficient reading abilities. When a child sees a sign for a favorite restaurant along the road, looks at a box of cereal while eating breakfast, or flips through a magazine looking at the pictures while waiting at the doctor's office, they are benefiting from ongoing exposure to print materials. Similarly, when hearing proficient readers share stories, like when a family member reads before bed or an educator shares a picture book at circle time, children are learning about reading. These everyday experiences support children's emergent literacy skills and contribute to their future reading proficiency.

Because of the emergent nature of literacy development and its dependence on the experiences, exposure, and environment of the child, reading skills progress in an individual fashion. A child's chronological age will not automatically tell us what a young reader will need; however, young children's reading abilities typically develop in stages

along a continuum. Having an understanding of these stages of reading helps early childhood educators recognize where children are in their development, regardless of age. The stages of reading development give educators a road map to know what children need to know next to continue on their literacy journey. Stage criteria or indicators show educators the procedural knowledge, or understanding of the mechanics of reading, needed to effectively build upon young children's reading abilities.

Children acquire knowledge about reading before they are able to decipher individual words.

8.3a Emerging Readers

Researchers use a variety of models to represent the progressive skills and proficiencies children acquire over time (Chall, 1996; Clay 1991; Whitehurst & Lonigan, 2002). As children internalize specific reading skills they use the skills in an integrated manner to interpret and respond to text. There is an age range that can be considered "typical" or expected for

each of the stages. For instance, we typically see children in the preschool years developing emergent reader skills. However, these stages are not always age specific and sometimes children move more slowly or quickly than would be expected. Some children under age 5 begin showing signs of early reading skills while some kindergarten students are still developing emergent skills. It is important that early childhood educators use appropriate assessment techniques to observe children's current stage and level of functioning.

There are a number of descriptors within each of the stages of reading. These literacy behaviors give early childhood educators information that describe a student's current literacy abilities as well as identify what they need to learn next. This textbook is focused on the first stage, emergent reading, but the final chapter delves into the changes you will see as children begin moving into the early literacy stage. If we think about Adelyn, from the opening vignette, it is clear that she is demonstrating many emergent reader behaviors.

8.3b Emergent Literacy Continuum

When examining what is happening during the emergent reading stage, it is helpful to recognize the elements of procedural knowledge that emergent readers need. Emergent reading elements can be identified as either a constrained skill or a continuous component (Snow & Matthews, 2016). Constrained skills include phonological awareness, alphabetic principle, and concepts of print (Snow & Matthews, 2016). Continuous components include comprehension, vocabulary, and fluency. Constrained skills are considered finite, meaning that once a child has acquired the specific understanding it does not need to be relearned. Examples of constrained skills include knowing the names of the 26 letters of the alphabet and recognizing common sight words. Continuous components include knowledge that is

acquired over time, such as vocabulary. Both constrained skills and continuous components are important emergent literacy qualities of the first 5 years of life. The figures in each section span from birth to age 5 and are separated into six stages, including early infancy, later infancy, early toddler, later toddler, early preschool, and later preschool. These stages are used to highlight typical developmental time frames and demonstrate complexity as children progress. The Continuum of Emergent Reading Development is part of the Virginia Unified Early Learning and Development Standards for All Children Ages Birth-5 (Virginia Department of Education, 2021) and serves as a resource to help early childhood educators more effectively support student learning. To view all of the Virginia Unified Early Learning and Development Standards for All Children Ages Birth-5, go to the resource section below.

   8.3b1 Phonological awareness. Phonological awareness is a constrained set of skills, but critical to the developing reader's ability to understand language and eventually print. Phonological awareness is a broad term encompassing an awareness of various-sized units of sounds in spoken words such as rhymes (whole words), syllables (large parts of words), and phonemes (individual sounds). Sometimes referred to as a metalinguistic skill (Goswami, 2002), phonological awareness involves the ability to hear and distinguish the auditory components of spoken language. In Table 8.1, the indicators for phonological development are listed under each of the six age bands. You will see that children move from listening to familiar words to imitating sounds. Eventually children begin playing with language in ways that demonstrate an understanding of rhyming words, segmenting individual sounds, and blending sounds in words. For instance, we may hear a young child playing with language and saying, "bad, fad, cad, sad, mad, wad" as they are starting to recognize that some words rhyme, or end with that same sound.

   Rhyming is usually the easiest and earliest form of

phonological awareness that children acquire. Being able to break the spoken word "teacher" into two syllables is a form of phonological awareness that is more sophisticated. Additionally, we may hear another child say, "*Cat* sounds like my name, *Caroline*!" This child was able to recognize that the word "cat" starts with the same sound, or phoneme, as her name. Phonemes are the smallest individual units of sound in a spoken word. Phonemic awareness, the ability to hear and register phonemes, is the most advanced level of phonological awareness. Upon hearing the word "sleigh," children with phonemic awareness will recognize that there are three separate speech sounds—/s/ /l/ /ā/—despite the fact that they may have no idea what the word looks like in its printed form and despite the fact that they would likely have difficulty reading it. It is important to understand that all of these phonological skills are focused on auditory and verbal feedback and are not connected to visual symbols or letters.

Table 8.1 A Continuum of Emergent Reading Development: Phonological Awareness

A Continuum of Emergent Reading Development: Phonological Awareness

Developmental Progression	CLLD 2.3. Learning Spoken Language is Composed of Smaller Segments of Sound
Early Infancy 0-8 months	• Listens and attends to culturally and linguistically familiar words (including rhymes and songs) (CLLD2.3a) • Begins to create speech and non-speech like sounds (e.g., babbling) (CLLD2.3b)
Later Infancy 6-14 months	• Begins to imitate sounds they hear in their everyday environment (CLLD2.3c)
Early Toddler 12-24 Months	• Orally repeats a few words of culturally and linguistically familiar rhymes and repetitive refrains in stories or songs or directions/requests from adults or peers (CLLD2.3d)
Later Toddler 22-36 Months	• Orally produces or reproduces simple culturally and linguistically familiar rhymes or sings favorite songs (CLLD2.3e) • Imitates most sounds of language using familiar words (CLLD2.3f)
Early Preschool 34-48 Months	• Imitates and enjoys rhyme and alliteration (e.g., Jalisa jumped) (CLLD2.3g) • With instructional support, distinguishes when two words rhyme and when two words begin with the same sound (e.g., boy/toy, dog/dad) (CLLD2.3h)

Later Preschool 44-60 Months	• Begins to rhyme and produce rhymes of simple words (CLLD2.3i) • Begins to orally segment and combine compound words (e.g., lunchbox segmented is lunch box; when combined it is lunchbox) (CLLD2.3j) • Begins to segment and combine syllables (e.g., purple segmented is pur-ple; when combined it is purple) (CLLD2.3k) • Begins to identify the initial and final sound in words (e.g., /b/ in bat) (CLLD2.3l)

Table 8.1 is from Virginia's Early Learning & Development Standards (ELDS): Birth-Five Learning Guidelines. It is used with permission of the creators and is not an open education resource covered by a Creative Commons License.

8.3b2 Alphabetic principle. The next constrained skill is understanding the purpose of the alphabetic code, or the alphabetic principle. The alphabetic principle is a knowledge of the names of the alphabet letters and their associated sounds. We know that a child has mastered the alphabetic principle when they are able to name all of the letters automatically when they see them in print and then say the sound that the letter typically makes. You will notice in Table 8.2 that children don't typically develop an awareness of alphabet letters and the connection to their sounds until after 2 years of age. Once this knowledge is developed, it will enable children to develop a more complex understanding of the sounds that groups of letters typically make in words. Students can then be taught to decode, which means to blend the letter sounds together to read words. Decoding is a deliberate act in which readers must "consciously and deliberately apply their knowledge of the mapping system to produce a plausible pronunciation of a word they do not instantly recognize" (Beck & Juel, 1995, p. 9). Once a word is accurately decoded a few times, it is likely to

become recognized *without* conscious deliberation, leading to efficient word recognition.

Table 8.2 "A Continuum of Emergent Reading Development: Alphabetic Principle"

A Continuum of Emergent Reading Development: Alphabetic Principle

Early Infancy 0-8 months	
Later Infancy 6-14 months	
Early Toddler 12-24 Months	
Later Toddler 22-36 Months	• Begins to recognize a few upper or lowercase letters (if taught) (CLLD2.4a)
Early Preschool 34-48 Months	• Begins to recognize more upper, and lowercase letters if taught (CLLD2.4b) • Identifies sounds and recognizes letters associated with beginning of first name and last name (CLLD2.4c) • Begins to connect alphabet letters and corresponding sounds (e.g., connecting letters and sounds of common letters/words) (CLLD2.4d)
Later Preschool 44-60 Months	• For many, with instructional support, matches the sound with the corresponding letter (CLLD2.4f) • For many, with instructional support, matches the letter with the corresponding sound (CLLD2.4g) • Recognizes many upper and lowercase letters (CLLD2.4h) • Will use a combination of letters and symbols to represent words (CLLD2.4i)

Table 8.2 is from Virginia's Early Learning & Development

8.3b3 Concepts of print. The final category of constrained skills are concepts of print, or print concepts (Snow & Matthews, 2016). Concepts of print refers to an awareness that print has an orientation (how to hold the book to see the text and pictures) and directionality (text moves from left to right). Concepts of print also include an awareness of the distinction between pictures or photographs, sentences, words, and letters. As young children are developing an awareness about print they begin turning a book over until it is "right side up" and can point to the pictures and words. Eventually, children understand that words are made up of individual letters grouped together and then groups of words form sentences. They might not be able to read all the words independently, but they can track the words left to right with a proficient reader in familiar text.

Table 8.3 "A Continuum of Emergent Reading Development: Concepts of Print"

A Continuum of Emergent Reading Development: Concepts of Print

Developmental Progression	CLLD 2.1. Paying attention to print as meaningful
Early Infancy 0-8 months	• Explores a book by touching it, patting it, or putting it in mouth (CLLD2.1a)
Later Infancy 6-14 months	• Holds books, turns pages, looks at the pictures and uses sounds, signs, or words to identify actions or objects in a book or other written material (CLLD2.1b)
Early Toddler 12-24 Months	• Recognizes and engages with print and pictures, or braille in their environment (e.g., points to words and images; touches with fingers) (CLLD2.1c) • Demonstrates interest in written forms of language, such as print in books or signs on building (CLLD2.1d) • Distinguishes print from pictures (CLLD2.1e)
Later Toddler 22-36 Months	• Attributes meaning to some symbols, such as a familiar logo or design (CLLD2.3f) • Identifies common words in the environment (e.g., name, exit, stop) (CLLD2.1g) • Points to and names some letters or characters in their names when seen in other words (CLLD2.1g)
Early Preschool 34-48 Months	• Begins to select books for reading enjoyment and reading related activities including pretending to read to self or others (CLLD2.1i) • Demonstrates an understanding of the conventions of print (e.g., directionality of print and texts) (CLLD2.1j) • Understands that the print communicates the message in stories or other texts (CLLD2.1k)

Later Preschool 44-60 Months	• Distinguishes among a variety of texts and their purposes (e.g., books, shopping lists, etc.) (CLLD2.3l) • Begins to track individual words in text by pointing or touching (CLLD2.1m)

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8.3b4 Comprehension, vocabulary, and fluency. The continuous components of comprehension, vocabulary, and fluency are all in the beginning stages of development during this time period. Comprehension is the capacity to extract and obtain meaning from spoken and written language. Meaning is constructed and involves the reader not just obtaining information, but drawing upon prior knowledge and experiences. Rich language experiences support children's developing vocabularies and comprehension. These experiences occur long before a child is given formal reading instruction and is based upon interactions with others and involvement with print.

Vocabulary is the use and knowledge of words and word meanings in a variety of modes and contexts. The development of a child's vocabulary begins at infancy, when a baby starts hearing speech and babbling. Oral language experiences, such as in-person conversations, dialogue heard on TV, or language heard during the reading of children's books are primary means for accumulating vocabulary. By the age of 2, children usually speak about 200 to 300 words and understand many more. Once children enter school, they learn approximately 3,000 words per year and can comprehend many more than they can read (Nagy, 2009). Developing a rich vocabulary is an important element of proficient reading. Studies have shown that a child's vocabulary knowledge is a

strong predictor of reading comprehension (Duncan et al., 2007).

The third component of fluency is also an important factor of reading proficiency. Fluency is the ability to read text smoothly and easily using appropriate intonation and patterns of stress (called prosody), making reading sound like speaking (Shanahan, 2006). Anyone who has read with an early reader knows that their reading is choppy and often spoken word by word. This is because developing readers have to spend a good deal of energy attending to decoding each word. Once readers develop more proficiency or automaticity, their reading mimics speech and their fluency is greatly improved. At the emergent stage readers are not able to read words fluently (or often read words at all), but they are able to imitate fluent sounding reading when they retell stories and repeat elements of text they have heard and memorized.

Morning message is an opportunity for children to practice reading.

Comprehension, vocabulary, and fluency work in

tandem to help readers make meaning of text. Because these components continue to develop and expand as readers become more proficient, we see them change drastically as children's literacy skills evolve. In the emergent stage, we expect to see that children are learning new words from text, beginning to understand story structure, and developing the ability to retell familiar text including key vocabulary and relevant details. Young children will not show mastery in these areas but are developing the foundational understandings about how reading works. For instance, young children will often retell key events from a favorite text starting at the end and moving backward to the beginning (often only including parts they found particularly interesting). This is a developmentally appropriate expectation and shows a blossoming understanding of how to talk about text. Additionally, we may find children relying heavily on picture clues to talk about text, but using appropriate "reading" prosody when repeating parts of the story that they have heard before (e.g., changing the intonation of their voice to make the sentence end in a question because they have heard a proficient reader read the text in this way before). These beginning glimmers of fluent reading behavior are important experiences for young readers. The indicators in Table 8.4 elaborate on the types of behaviors we usually see in young children related to these continuous components.

Table 8.4 "A Continuum of Emergent Reading Development: Comprehension, Vocabulary, and Fluency"

A Continuum of Emergent Reading Development: Comprehension, Vocabulary, and Fluency

Developmental Progression	CLLD 2.2. Understanding Ideas, Vocabulary, and Information in Stories and Texts
Early Infancy 0-8 months	• Looks at picture books and listens to an adult talk about pictures in a book (CLLD2.2a)
Later Infancy 6-14 months	• Touches or points to pictures in response to adult's prompt (CLLD2.2b)
Early Toddler 12-24 Months	• Begins to show specific interest in being read to (e.g., brings a book to an adult or points to pictures in the environment or a book) (CLLD2.2c) • Engages in familiar stories verbally (e.g., fills in a word when the reader pauses) or with motions (e.g., imitates actions with an adult) (CLLD2.2d) • Listens to explanations of words or repeats words adults explain or emphasize (CLLD2.2e)
Later Toddler 22-36 Months	• Identifies the feelings of characters in a book or story (CLLD2.2f) • Asks to be read to or asks the meaning of written text (CLLD2.2g) • Makes connections to the story through talking about characters and events (CLLD2.2h) • Expresses empathy for characters and problems in text and stories with adult guidance and support (CLLD2.2i) • Repeats words heard during story reading (CLLD2.2j)

Early Preschool 34-48 Months	• Asks or answers questions about what is happening in a book or story (CLLD2.2k) • Retells 1-2 key events from a story (CLLD2.2l) • Narrates a story using pictures as a guide (CLLD2.2m) • Recites from memory words, phrases, and parts of favorite stories (CLLD2.2n) • Recognizes nouns as the person, place, or thing in a sentence (CLLD2.2o)
Later Preschool 44-60 Months	• Listens and responds to a variety of texts and media (e.g., audio book, music and movement) (CLLD2.2p) • Tells fictional or personal stories sequentially and with 3 or more details (CLLD2.2q) • Begins to understand cause and effect relationships in fiction and nonfiction texts (CLLD2.2r) • Predicts what will happen next in an unfamiliar story (CLLD2.2s) • Uses new words learned through listening to stories (CLLD2.2t)

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8.3c Factors Impacting Reading Development

Although many children develop along the emergent literacy continuum in a similar timeline or age range, there are a number of factors that can impact the typical trajectory of an individual child. For instance, English language learners, children with vision or hearing impairments, or other developmental delays may follow different learning trajectories. Individual children may acquire literacy skills on an adjusted timetable, but this doesn't mean that our overall goal or expectation for them should be lowered. Educators'

knowledge of literacy progressions and intentional actions will support learners' literacy development. The National Consortium on Deaf-Blindness (NCDB) Literacy Practice Partnership states on their website, All Children Can Read, that, "Regardless of age or ability acquiring literacy skills is a question of 'how' rather than 'if' or 'when'" (Shifting the Perspective, 2020).

This same expectation is true for students with a developmental disability. According to the Center for Disease Control and Prevention (CDC, 2013), developmental disabilities "are a group of conditions due to an impairment in physical, learning, language, or behavior areas. These conditions begin during the developmental period, may impact day-to-day functioning, and usually last throughout a person's lifetime" (para. 1). The first step in helping a child with developmental disabilities, or other limiting factors, to become literate is to presume competence in their abilities to gain such knowledge and skills (Biklen & Burke, 2006). This means to put aside doubts and preconceived notions about what a student may be able to accomplish based on a student's disability label, estimates of IQ, or assumed limitations. To presume competence in students is to act on the belief "that all individuals can acquire valued skills if given appropriate structures and supports" (Copeland & Keefe, 2007, p. 2). Effective educators teach knowing that children can learn.

Pause and Consider: Steven's Books

Notice how an educator describes how Steven, a boy with Autism Spectrum Disorder (ASD) and an

intellectual disability, reads for information. "He had with him, as always, several different public library books, all related to butterflies and insects. He laid three of the books, opened, on the floor, then centered himself among them, glancing at each of the exposed pages. He then flipped to the next page of each book and repeated the process" (Kliewer & Biklen, 2001, p. 5).

What does the educator's explanation tell you about Steven's interactions with text?

While many students with developmental delays interact with texts in traditional ways, some students with disabilities may interact with texts in ways that seem unusual or different from how students without disabilities interact with texts. For example, some students, particularly those with autism, may be interested in a book's texture or fascinated by how a book looks when it is spun around. Other students may be interested in and insist on reading books on one specific topic for a substantial period of time. Students, like Steven, are sometimes dismissed as emergent readers because their teachers misinterpret their unique ways of interacting with texts as indications that they are not attending to and/or are not ready for instruction. Others feel compelled to restrict students' access to texts that they worry might be topics of overfocus, insisting that the student read something other than books about their favorite subjects. However, students' interactions with texts should be welcomed despite differences. A child's spinning of a book or investigation of the book's texture should never be taken as a sign that the child is not ready for literacy instruction. Through modeling and ongoing interactions with text, educators can expand children's explorations by continuing to invite children to use

texts in more conventional ways. Students will benefit from learning to use texts in the intended fashion, even when they are still experimenting with texts in unusual ways. As long as a child is demonstrating interest, teachers should use the child's interactions as a starting point for further invitations to literacy growth, and also encourage the child to interact with texts in ways that are pleasing to them.

Shared reading experiences allow students to interact with text and each other.

8.4 Fostering Emergent Readers

The early childhood educator has an important role to play in the conceptual, procedural, and generative knowledge development of young readers. The previous sections of this chapter discussed how to help students understand what reading is all about (conceptual knowledge) and what specific skills and concepts children need to build their emergent reading capacity (procedural knowledge). This section will

address instructional strategies and assessment options to support conceptual and procedural knowledge development. It will also extend to generative knowledge, or the application of these skills and concepts in real world settings.

8.4a Instructional Strategies for Emergent Readers

Once early childhood educators understand the skills and components of emergent reading development, they can be intentional about the instructional strategies they utilize in the classroom. Using targeted instructional strategies helps maximize student learning and creates the environment for children's literacy to thrive. Intentional literacy practices also allow educators to provide instructional modifications and supports to scaffold students' learning as well as create inclusive literacy experiences. There are an infinite number of ways that educators can create intentional, inclusive literacy experiences. However, this section will discuss four categories of instructional practices that all early childhood educators should strive to incorporate: developing print-rich environments, playing with language, creating play-based text experiences, and providing diverse reading experiences. Figure 8.5 includes instructional practices for promoting emergent reading development in each of these four areas.

8.4a1 Developing print-rich environments. Chapter Five of this textbook talks extensively about the importance of attending to the environment and how it can support literacy learning. Looking specifically at emergent reading development, it is critical that children see text used in meaningful ways in their learning environment. Regular exposure to common words, names, and items in their classroom can have a significant impact on students' emergent reading abilities. Showing children how text works in meaningful contexts also further promotes children's understanding that reading is about making meaning. For

instance, many teachers label parts of the classroom and frequently-used items (e.g., cubbies with children's names, centers, the sink). Educators can also intentionally focus on diversifying the types of print in the classroom as well as how children notice and use the available print materials.

8.4a2 Playing with language. In addition to surrounding students with meaningful print, educators can foster a playful stance towards language. This intentional posture shows children that learning about reading can be fun, and reduces the stress that can come with learning about a new language system. Playing with language is a way to help students investigate how words and sounds can be manipulated. Having a focus on language play also frees us to immerse children in repeated readings as well as repeated engagement with songs, rhymes, and games that children love. It is not uncommon for children under five to find a book or song that they love and want to hear over and over. Encouraging these repeated exposures while also continuing to provide new text-based language play is the key to developing strong emergent reading skills. Chapter Seven of this textbook discusses the important role language plays in children's broader literacy development.

8.4a3 Creating play-based text interactions. Because play is the primary vehicle for young children's learning, early childhood educators have the opportunity to work from this area of strength and comfort. Finding logical extensions to children's play that incorporate text interactions requires the educator to pay attention to children's interests and match the work they are doing in their play with authentic materials. This could include strategically placing certain materials in a center (e.g., restaurant menus in the dramatic play center) or inquiring if children would like to incorporate text into an activity (e.g., asking children if they would like to bring some of the materials from the writing center over to make signs for the road they are building in blocks). Maintaining an intentional and inclusive

focus on embedding developmentally appropriate text allows students to use play to act out proficient reader behaviors.

8.4a4 Providing diverse reading experiences. One of the most important actions that early childhood educators can take is regularly providing children with diverse reading experiences. In order to get good at reading, we need to see and hear proficient readers in action. Reading a variety of texts aloud exposes children to the many purposes of reading. It also builds children's vocabulary knowledge, develops their understanding of how print works, and helps them know what to expect from certain types of text. For instance, the more fiction stories that adults share with students, the more quickly they begin to understand the elements of narrative text (e.g., characters, setting, problem/solution) and use them to aid comprehension. Young children who have been exposed to a variety of texts will quickly see how the elements of a narrative story are different from their favorite non-fiction dinosaur book, which uses photographs, captions, and labels to share factual information. While children are not actually reading in most of these experiences (decoding and understanding the words independently), they are developing foundational understandings about print that will support their development from an emergent to an early, beginning reader.

Giving children the opportunity to interact with books is a valuable part of supporting emergent literacy.

Table 8.5 "Instructional Practices That Support Reading "

Instructional Practices That Support Reading

⌄

Developing A Print-Rich Environment

- Label classroom spaces and objects using words
- Use names of children throughout the room
- Find meaningful symbols and pictures to support

children's access to materials
- Infuse familiar text into centers
- Create print materials designed by the students
- Supply nonfiction and fiction texts
- Display student work with documentation (adult dictates student's ideas and posts next to their artwork)
- Diversify print materials (magazines, travel brochures, menus, etc.)

Playing with Language

- Share nursery rhymes and poems
- Sing songs throughout the day (transition times, good morning greeting)
- Read and revisit rhyming books encouraging children to say common refrains
- Select a word of the day/week (have children use, draw, find, etc. the word)
- Teach children idioms, alliterations, and other fun ways to play with words
- Use children's names to examine letter names, sounds, and shapes
- Build on students' interest in letters and words

Creating Play-Based Text Experiences

- Use felt boards and options for children to create their own story or retell a familiar story
- Provide puppets and a space for a "theater" to allow

children to develop puppet shows

- Develop a space for drawing and writing with various tools
- Design a dramatic play area with familiar items from home (including text-based items)
- Observe children's play and find ways to bring in text materials to enhance their experiences
- Develop signs or labels that children can use in their play
- Dictate words for students to record experiences

Providing Diverse Reading Experiences

- Engage in daily read alouds of age-appropriate texts
- Build in independent reading time where students can select their own books to "read" and retell using pictures and background experience
- Develop small group and buddy reading moments
- Regularly engage in shared reading where the teacher models their thinking about a text
- Reread familiar and loved stories
- Allow children to participate in interactive reading where they help the teacher "read" parts of the book
- Use print referencing techniques to point out elements of the text (e.g., page numbers, title, where to start reading, the direction of the text, author and illustrator)
- Examine text features of non-fiction books (e.g., table of contents, glossary, maps, charts, labels)

8.4b Literacy Assessments for Emergent Readers

There are a number of assessment options to understand what students know about the constrained skills of

phonological awareness, alphabetic principle, and concepts of print as well as the continuous components of comprehension, vocabulary, and fluency. Chapter 6 of this textbook discusses many purposes, types, and uses of both formal and informal assessment options for literacy. Because young children, birth to age five, are typically showing emergent reading abilities but are not yet proficient readers, observation is the early childhood educator's most important tool. Carefully watching children as they interact in whole groups, small groups, and individual settings can tell us a lot about what children know about reading and what they are ready to learn. Additionally, it is critical that educators develop methods of documenting these observations over time.

Educators can use assessment options such as anecdotal notes, observational checklists, and artifacts (see Chapter 6 for further explanation) to document children's emergent reading behaviors. For instance, we may observe an older four-year old child showing signs that they have mastered the alphabetic code (e.g., the child can name all the letters easily) and are ready to start a more focused look at the connection between letters and sounds as well as familiar words in their environment. However, we may also observe significant lags in development (e.g., the child demonstrates indicators of early and later infancy at 3 years of age). Observational assessment options can be just as important to document these concerns. Using well-constructed assessments can open up discussions with families and caretakers about factors impacting the child's reading development and serve as a guidepost for what supports the child needs to continue building their reading foundation. Intentionally selecting emergent literacy assessment routines and practices ensures that our instructional strategies will match students' needs.

Moira, Angela, and José have been spending a good deal of time in the art center recently. The teacher, Mrs. Peters, has watched as they used construction paper, stencils, and markers to design new pieces of artwork. The children have been especially interested in the shape stencils after the class read the book, *Round is a Tortilla* (Thong, 2015). Mrs. Peters asked the children if they would like to find the words to label their shape artwork. They eagerly agreed that this was a good idea and ran to grab the book from the classroom library. Mrs. Peters helped them locate the words: circle, triangle, rectangle, square, oval, and star. She then wrote the shape words on index cards and left the children to decide how to incorporate these words into their work. After some discussion, the children decided that they should divide up the words so each child gets two shapes. Then they spread out the shape pictures they had done and took turns adding shape words to each picture. Mrs. Peters walked by the center a few times during their play and noted how Moira and José were easily naming each shape word as they labeled the pictures and were saying the name of each letter as they wrote on the artwork, but Angela kept looking up for confirmation from her peers about which word matched each shape and was having difficulty saying the letter names as she labeled the pictures.

Identify the instructional practices Mrs. Peters incorporated to support the students' literacy

development. How should Mrs. Peters utilize assessment tools to document the students' knowledge and abilities?

The expectation that all children can and should become literate is an important orientation of early childhood educators. Literacy development is a right of all children. The goal of engaging emergent readers requires early childhood educators to understand how to identify emergent literacy skills and build on the child's previous experiences and abilities. Emergent literacy includes constrained skills (phonological awareness, alphabetic principle, and print concept) and continuous components (comprehension, vocabulary, and fluency). Children need to develop conceptual knowledge about reading alongside procedural and generative knowledge so they can use literacy in authentic ways. Familiarity with common benchmarks and strategies helps educators support children in their literacy growth and development. Understanding typical trajectories guides educators in the planning of rich reading experiences for all children.

Additional Resources

Center for Early Literacy Learning
http://www.earlyliteracylearning.org/index.php

Literacy for Children with Combined Vision and Hearing Loss http://literacy.nationaldb.org/index.php/literacy-development-continuum/

Virginia Unified Early Learning and Development Standards for All Children Ages Birth-5: https://tinyurl.com/3y9epzkw

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Additional Images

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9. Writing Development: Nurturing Emergent Writers

With Christopher K. Kidd

"The writer is an explorer. Every step is an advance into a new land."

- Ralph Waldo Emerson

Mr. Jenbere and Ms. Daryl combine classes for most of the school day. Mr. Jenbere's class is a federally funded prekindergarten classroom with 18 students. Two of Mr. Jenbere's students have Individual Education Programs (IEPs) and one of them uses a wheelchair. Ms. Daryl's preschool class is for children who are identified as deaf and hard of hearing. All six of her students have IEPs. The students in these classes range in age from 2- to 5-years-old. Mr. Jenbere and Ms. Daryl believe that their co-teaching and inclusive practices strengthen the school experience of the children in both classes. Each of these classes has a paraprofessional and support from a variety of specialists, which gives these children a team of dedicated educators working towards their healthy development.

Mr. Jenbere and Ms. Daryl provide meaningful opportunities for writing throughout the day, including a specific time designated for writing instruction. They make an effort to connect writing instruction with all aspects of the curriculum in authentic ways. Today, the children are writing thank you notes to the assistant principal, who read them a story this morning. The children are gathered around tables with educators who are considering each child's strengths and needs as they support and guide children during their writing

time. They know that the unique abilities of individual learners must be considered in addition to the goals that they have for all of their children.

At Mr. Jenbere's table, six children are engaged in writing using a variety of materials, including white unlined paper, colored construction paper, cardstock, markers, and crayons. Three children are using markers to draw pictures of the story the assistant principal read. They are talking to each other about the story as they draw. Arzu is using a crayon to scribble and is talking to herself as she writes. Mr. Jenbere helps Hasan identify the sounds in a word and then turns his attention to Richelle who reads her thank you note aloud. After listening to Richelle, he jots down an anecdotal note that documents not only the writing skills she used but also insights related to her comprehension of the story. Later, Mr. Jenbere and Ms. Daryl compare their anecdotal notes as they make plans for tomorrow's writing instruction. They understand that assessment during writing instruction provides a window into the children's learning and development.

9.1 Introduction

Like emergent reading, emergent writing provides a critical foundation for future literacy development (NELP, 2008). When young children, like the children in Mr. Jenbere's and Ms. Daryl's classes, are provided opportunities to draw, scribble, and write, they gain understandings of the role print plays in their lives and the way writing is used to communicate ideas

(Kidd et al., 2014). Through these experiences, young children learn they can write to express their thoughts, share stories, communicate information, and convey opinions. Like Richelle, they begin to view writing, including their drawings and scribblings, as symbolic representations that enable them to communicate with their classmates, family members, teachers, and others. They also develop an understanding that writing can be used to make notes for themselves, such as play plans and reminders. As they write, they gain insights into writing as a process and develop a sense of ownership of their writing. In addition, like Hasan, they start to develop understandings of written conventions, including sentence structure, spelling, grammar, and mechanics. At the same time, children's fine motor and handwriting skills also begin to develop.

Literacy processes are reciprocal and symbiotic in nature. When young children are engaged in activities that foster their emergent literacy skills, they begin to see the interrelationship among language, reading, and writing and are able to draw upon their emerging knowledge to enhance their literacy development (Goodman & Goodman, 1983). Conceptually, children at a young age begin to understand that reading and writing are communication processes. When children write, these processes are integrated as they read and reread their written message (Sulzby & Teale, 1985). This is seen with a child, like Richelle, as she listens to a story, writes a thank you note, and reads the thank you note to her teacher. At the same time, children are developing emergent literacy skills, such as phonological awareness, alphabetic principle, and concepts of print. These emergent reading skills influence skill development in writing and vice versa. For example, a child like Hasan, who is writing letters and words by listening to the sounds in a word and writing down the corresponding letter, is using his emerging understanding of letter-sound correspondence. As he strengthens his skills in letter-sound correspondence in writing, he enhances his ability to apply

these skills when reading. Similarly, as he reads and develops his abilities to decode (read) words, he will develop his abilities to encode (write) words. By engaging in activities that develop these skills, he will become more proficient at generating text as he writes and generating meaning from text as he reads.

Discussions that situate emergent writing within the broader context of literacy development and acknowledge the interrelationship between reading and writing are important to understanding children's literacy development. However, too often, writing is not given the time and attention that is needed in early childhood education classrooms (Pelatti et al., 2014). Therefore, in this chapter, we will focus specifically on understanding children's writing development and how to use this knowledge to assess, plan, and implement meaningful writing experiences throughout the school day and at home. We will also examine factors that influence children's emergent writing development. Developing these understandings is critical to ensuring that writing instruction is an integral part of the instructional day and multiple opportunities for writing are provided across the school day as well as at home.

Figure 9.1 Framework for Developing Emergent Literacy
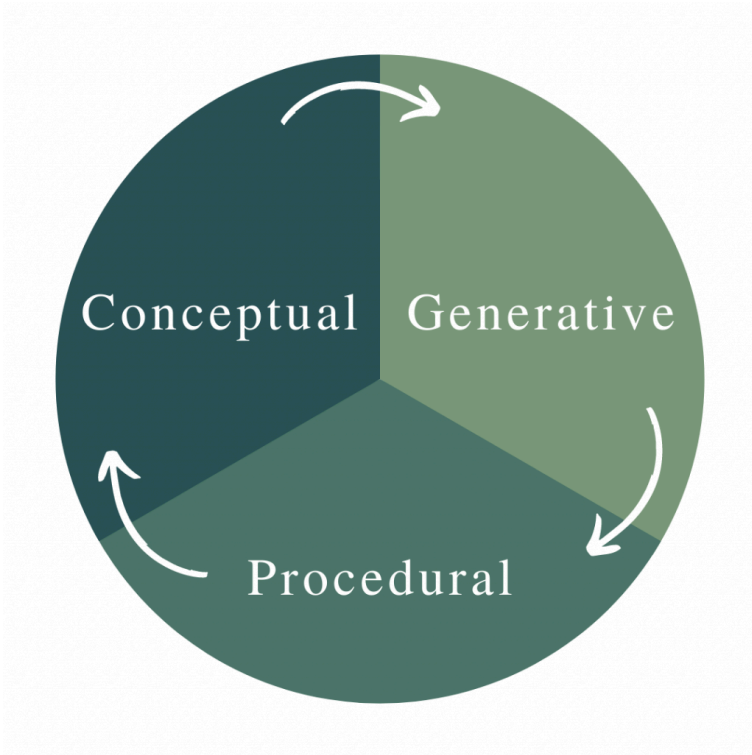
In this chapter, we will use the Framework for Developing Emergent Literacy (see Figure 9.1) introduced in the previous chapter to explain the dimensions of emergent writing (Puranik & Lonigan, 2014). The first dimension, *conceptual knowledge*, focuses on the conventions and functions of writing, including children's understandings of how print works and that print conveys meaning. The second dimension, *procedural knowledge*, focuses on the mechanics of writing, such as knowledge of the alphabet, name writing, letter writing, spelling, and handwriting. Lastly, the third dimension, *generative knowledge*, focuses on composing phrases and sentences that communicate meaning. For very

young children, generative knowledge includes the emerging ability to communicate intentionally with others using drawings, scribblings, and symbolic representations. Using the Framework for Developing Emergent Literacy, this chapter will answer the following questions:

How do young children develop an understanding that writing conveys meaning and they can write to communicate their thoughts and ideas?

How do emergent writers progress on a continuum of development?

What can early childhood educators do to support emergent writers using effective instructional strategies and literacy assessments?

9.2 Writing is Communicating

Children learn at a young age that people use writing to express their thoughts, share stories, communicate

information, and convey opinions. Within their homes and in the community, young children have opportunities to observe the functions of writing in their day-to-day lives. For example, children might see family members write a grocery list and then observe their dad read the list and cross off items while walking down the aisles of the grocery store. Or perhaps, they notice their mom write a note for an older sibling and then watch as the sibling later reads the note and takes fruit out of the refrigerator for a snack. Likewise, they may witness their sibling's efforts to lobby for a new game by posting notes at strategic places around the home. As they sit on the couch next to an uncle, they could have an opportunity to watch him take out his phone, type in a text, and send the message to a friend. Out in the community, they might notice the server writing down their family's order and then bringing the items requested to their table. Likewise, they could observe an auto mechanic writing down their family's phone number and promising to give a call when the car is ready. These types of interactions in the home and community develop children's conceptual knowledge of writing and their understanding of writing as a way to communicate.

Learning about writing continues to take place as children engage in writing activities not only in the home, but also in the classroom. For example, the children in Mr. Jenbere's and Ms. Daryl's classroom in the vignette above are developing their writing abilities and practicing their writing skills as they write their thank you notes. This activity provides an opportunity for children to draw pictures and talk about the story the assistant principal read as they write their thank you notes. Through their pictures, they record thoughts that are important to them with the understanding that these ideas can then be shared with others. At the same time, an activity like this allows children, like Arzu, to capture their thoughts through scribbles. Likewise, children, like Hasan, use their growing knowledge of letters and sounds to add words to their

notes. This type of activity also enables children, like Richelle, to develop their understanding of the permanency of writing and to see themselves as writers with an audience. The children's emerging understandings of writing are apparent in these efforts.

The Framework for Developing Emergent Literacy presented above provides educators with a way to think about children's writing development. This framework recognizes the interrelationship between reading and writing and organizes emergent writing into three dimensions: conceptual, procedural, and generative knowledge (Puranik & Lonigan, 2014). These dimensions are important to consider when assessing children's writing and planning and implementing instruction.

As writing is utilized in children's everyday lives, their **conceptual knowledge** of writing develops and they gain insights into how print works. Puranik and Lonigan (2014) define conceptual knowledge as skills that "represent knowledge about the conventions and functions of writing" (p. 465). At a young age, children learn that writing is a means for communicating thoughts. They gain insights into the purposes or functions of writing and recognize that they can write to express ideas and feelings, tell a story, share information, and present an opinion or point of view. They also develop concepts of print specific to writing, such as writing in English occurs from left to right. In addition, they begin to understand writing as a symbolic representation of ideas as they recognize and assign meaning to logos, markings, and symbols they encounter (Byington & Kim, 2017).

At the same time, young children develop **procedural knowledge** of print. Puranik and Lonigan (2014) define procedural knowledge as "knowledge of the specific symbols and conventions involved in the production of writing" (p. 456). These skills are important to children's future ability to use predictable letter-sound relationships to read and write

fluently. As children develop procedural knowledge, they gain understandings of the alphabetic principle. As noted in Chapter 8, the alphabetic principle involves learning letter names and the sounds associated with them. Young children apply these principles as they begin to write letters and words, including names. As children gain an understanding of letter-sound relationships, they use this knowledge to help them spell words. Developing children's fine motor skills and handwriting is also important in the early years (Byington & Kim, 2017).

Children's **generative knowledge** of writing develops as they apply their conceptual and procedural knowledge of writing. Puranik and Lonigan (2014) define generative knowledge as "children's emerging ability to compose phrases and sentences in their writing" (p. 456). Initially, young children use inventive markings to express ideas and convey important messages. Often, when we ask children to "tell us what you wrote," they will hold up their drawing and point to the markings and orally state the phrases and sometimes sentences they composed. Even though these children may not be able to form letters yet, they are still applying their understanding about how writing communicates a message that can be shared. Over time, children begin to use letters as symbolic representations that are organized to signify meaning (Bialystok, 1992). Experiences during the early years provide a foundation for children's later ability to use particular strings of letters to represent specific words and to use these words to compose phrases and sentences that communicate meaning (Puranik & Lonigan, 2014). In the early years, a foundation for generating meaningful text is laid as children use oral language and writing, including drawing and scribbling, to communicate (Byington & Kim, 2017).

Understanding how conceptual, procedural, and generative knowledge of writing develops in young children helps educators assess children's writing and plan for

differentiated instructional experiences that develop children's emerging writing abilities. In the next section, we describe how emergent writers progress. Educators use this knowledge of writing progressions to inform the decisions they make when planning and implementing assessment and instruction.

9.3 How Emergent Writers Progress

As children interact with the world around them, their writing abilities develop along a continuum from emergent to more conventional writing. This pathway is not exactly the same for each child because children develop differently due to a variety of factors that will be discussed below. This was apparent in Mr. Jenbere's and Ms. Daryl's classroom with Arzu who was scribbling and Hasan who was using his knowledge of letters and sounds to write. Both were 4-year-olds writing a thank you note. However, procedurally, they were at different places along the continuum in terms of the writing they produced.

Although children's developmental pathways vary by individual child, understanding children's writing progressions can help educators as they assess children's writing abilities, plan instruction, and provide a variety of learning experiences. In this section, we use the framework from *Virginia's Early Learning and Development Standards (ELDS): Birth-Five Learning Guidelines* to frame our discussion (see Table 9.1). In this framework, emergent writing skills are organized into three categories: writing to communicate, developing writing habits and skills, and handling writing tools. In each of these

categories, the development of specific skills is broadly organized by age ranges. These age ranges are intended to provide a general understanding of typical progressions and are not to suggest that there is a simple linear progression of writing abilities. In actuality, children's writing progresses as they increase their use of more advanced writing strategies and decrease their use of less advanced writing skills (Rowe & Wilson, 2015). For example, as children begin to use conventional letters, they may continue to scribble and use letter-like forms. Over time, they will decrease their use of scribbles and letter-like forms and will increase their use of conventional letters. For this reason, it is important to keep in mind that, although writing is a sequenced progression, there will be variability among children, as well as within children, as they are progressing along the continuum (Rowe & Wilson, 2015).

9.3a Writing to Communicate

As was evident in Mr. Jenbere's and Ms. Daryl's classroom, young children begin to understand that writing is a means to communicate thoughts, stories, information, and opinions. At an early age, children realize they can create drawings and make scribbles that they can then read to others (Bruyere, 2020). They come to understand that writing is intentional and is used to convey meaning (Rowe & Wilson, 2015). As their writing becomes more intentional, they begin to write for a variety of purposes and audiences and become more aware of the need to write so others can read their writing (Bruyere, 2020; Rowe & Wilson, 2015). They also become more cognizant of how the content of their writing varies depending on social expectations (Rowe & Wilson, 2015). For example, they learn what to include when they write a birthday card for a classmate or a story about a walk their family took in the park. Young children also develop a sense of ownership over their writing

and begin to develop their identity as a writer (Bruyere, 2020; Kissel & Miller, 2015; Rowe, 2018).

Table 9.1 "Continuum of Emergent Writing Development: Writing to Communicate"

Continuum of Emergent Writing Development: Writing to Communicate

Developmental Progression	CLLD3.1 Drawing, scribbling, and writing to communicate
Early Infancy 0-8 months	
Later Infancy 6-14 months	• Makes scribbles or marks on writing materials (CLLD3.1a) • Understands that marks on a page can communicate meaning (CLLD3.1b) • Uses writing instruments to make distinct marks (CLLD3.1c)
Early Toddler 12-24 Months	• Begins to use controlled marks like swoops, circles, and waves to represent their ideas (CLLD3.1d) • Writes in a linear fashion and connects marks with repetitive up/down or looping motions (CLLD3.1e) • Begins to use scribbles or intentional marks to represent objects (CLLD3.1f) • Attempts to "read" their writing or drawing to others, including their name (CLLD3.1g)
Later Toddler 22-36 Months	• Begins to use distinct letter-like symbols and letter formations with curves, lines, circles, and dots to represent words, ideas, phrases, sentences, and stories or events with or without drawing (CLLD3.1h) • Begins to draw/write for a variety of audiences (e.g., family members and teachers) (CLLD3.1i) • Begins to draw/write for a variety of purposes (e.g., grocery lists, invitations, birthday cards) (CLLD3.1j)

Early Preschool 34-48 Months	• Begins to use letter strings or a group of letters to represent words, ideas, phrases, sentences, and stories or events (CLLD3.1k) • Begins to use print in the environment as part of their writing (e.g., attempts to copy a sign or poster in room) (CLLD3.1l) • Begins to copy or write letters or numbers (CLLD3.1m) • Begins to represent all letters in their name (CLLD3.1n) • Begins to recognize name as separate from other pictures or writing produced (CLLD3.1o) • Begins to distinguish print from images or illustrations (CLLD3.1p)
Later Preschool 44-60 Months	• Begins to use initial letter sounds to represent a whole word (e.g., /f/ for fish) (CLLD3.1q) • Begins to represent the initial and final sounds to represent a word (e.g., 'dg' for dog) (CLLD3.1r) • Retells or reads their writing to others (CLLD3.1s) • Represents all letters in their own name, with sequencing, positioning, and reversals still evidenced (CLLD3.1t) • Begins to produce a correct representation of their name using capital letters, lowercase letters, or a combination of both moving from left to right (CLLD3.1u) • Begins to copy names of familiar people and objects (CLLD3.1v)

Table 9.1 is from Virginia's Early Learning & Development Standards (ELDS): Birth-Five Learning Guidelines. It is used with permission of the creators and is not an open education resource covered by a Creative Commons License.

9.3a1 Initial markings. Young children's journey as writers begins at an early age when they move from making accidental markings with little to no motor control to moving their forearm to make large intentional scribbles (Rowe & Wilson, 2015). As children's fine motor skills develop, they use
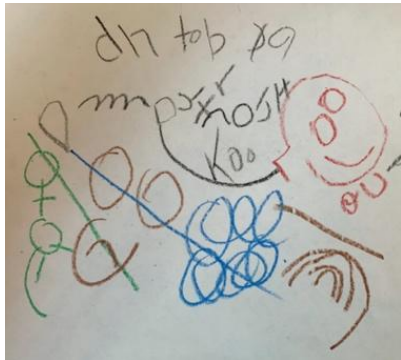
their hand and wrist movements to make more refined scribbles (see Figure 9.2). These scribbles initially represent objects and then begin to represent ideas, words, and phrases. As children's writing progresses, they scribble in a more linear manner using spaces between their scribbles, up-and-down looping motions, circles, waves, swoops, and zig zags. Over time, they add letters, which may be written backwards or upside down, to their scribbles and letter-like forms. Scribbles are eventually replaced with conventional capital and lower-case letters; however, there is no correspondence between letters and sounds (Rowe & Wilson, 2015).

Pause and Consider: Scribbles, Letter-Like Symbols, and Letter Formations

In Figure 9.2, there are three preschool writing samples. Use the writing continuum above to analyze the children's writing. Consider the following questions:

● What do you notice about these writing samples?

● What aspects of the descriptions about scribbling and letters do you see in these samples?

● What do you notice about the drawings?

● What does their writing show about what they know?

Figure 9.2 Scribbles, Letter-Like Symbols, and Letter Formations

Butterfly	The big red monster said, "I will chase said, "You can't get me because I ru

9.3a2 Moving toward using letters. Children also start to write their name and other words or phrases they have memorized (Rowe & Wilson, 2015). They learn to write their full name in English, for example, using capital and lowercase letters written from left to right. They also recognize their name as separate from their writing and that their name indicates ownership of what they produced. In addition, they begin to use conventional letters to write words and phrases they have memorized, like family members' names, and phrases, such as, "I like cake." They also begin to copy numbers, letters, and words from the environment into their writing.

Eventually, children start to write letters and groups of specific letters to represent their ideas as they use their growing knowledge of letters and sounds to write words, phrases, and sentences (Rowe & Wilson, 2015). This practice is often referred to as invented spelling. Initially, children tend to represent words using the initial letter sound (see Figure 9.3). For example, they might use "k" to represent "car" or "b"

to represent "ball." As children progress, they may write the initial and the final sounds (e.g., bk for bike) and eventually add middle consonant sounds (e.g, ktn for kitten). They add vowels (e.g., babe for baby) and begin to use correct spelling of some words (e.g., sat) as they move toward more conventional spelling.

Children are also developing understandings about **directionality** as their writing progresses (Rowe & Wilson, 2015). During the early years, children are learning how print is positioned on a page and the direction that print is written and read. For example, in English, children learn to write from left to right, move to the next line, and begin on the left again. Initially, children may place marks and scribbles anywhere on the paper. As they start to develop an understanding that writing is presented in a linear format, they may write from right to left horizontally or from top to bottom vertically. As children gain writing experience, they will begin to show more conventional directional patterns as they write.

Pause and Consider: Letter-Sound Correspondence

In Figure 9.3, there are three prekindergarten writing samples. Use the writing continuum above to analyze the children's writing. Consider the following questions:

- What do you notice about these writing samples?

- What aspects of the descriptions about letters and words do you see in these samples?

- What do you notice about the drawings?

> ● What does their writing show about what they know?

Figure 9.3 Letter-Sound Correspondence

| My brother and me | A butterfly |

9.3b Developing Writing Habits and Skills

As children develop their ability to communicate through writing, they also develop writing habits and skills (see Table 9.2). These writing habits and skills initially include showing interest in writing and experimenting with writing tools, such as crayons, markers, and touchscreen tablets. In addition, children begin to share drawings and writings with others as they become more aware of their audience and begin to see writing as a socially negotiated act between the writer and the audience (Kissel, 2018). They also develop their identity and

voice as writers and gain greater insights into the power of writing (Kissel & Miller, 2015). Initially, they may orally label or explain the objects they draw. Over time, they begin to use their writing to represent and communicate ideas, stories, information, and opinions.

Table 9.2 "Continuum of Emergent Writing Development: Developing Writing Habits and Skills"

Continuum of Emergent Writing Development:
Developing Writing Habits and Skills

Developmental Progression	CLLD3.2 Developing Writing Habits and Skill
Early Infancy 0-8 months	
Later Infancy 6-14 months	• Shows interest in exploring writing by watching others write and experimenting with writing tools (e.g., tries using crayons, markers, etc. to make marks) (CLLD3.2a)
Early Toddler 12-24 Months	• Begins to share drawings/writing and explains the meaning of the illustrations/text (e.g., says circle is a ball) (CLLD3.2b)
Later Toddler 22-36 Months	• Shares writing with others as a way to represent their understandings and ideas (CLLD3.2c)
Early Preschool 34-48 Months	• Begins to revise writing in the moment based on interactions with peers and adults (CLLD3.2d) • Begins to modify and expand their drawings/ writing to meet personal ideas and include others' ideas (e.g., several children begin drawing rainbows and unicorns after one child narrates their work) (CLLD3.2e)
Later Preschool 44-60 Months	• Continues to revise writing in the moment based on interactions with peers and adults (CLLD3.2f) • Begins to revise by adding details to drawings/writings to express their ideas (CLLD3.2g) • Begins to make a plan for the writing they will produce (e.g., creates picture to tell story and then writes) (CLLD3.2h)

As children represent their ideas in writing, they develop an understanding of writing as a process (Kissel et al., 2011). They become aware that they can plan, draft, revise, edit, and share their writing (Kidd et al., 2014). They learn that planning involves selecting a topic and generating ideas. As children talk, listen, and observe, they gather topics and ideas for writing. Children also plan what they want to write through their drawings. As children draw and add details to their drawings, they generate ideas that they can convey orally as well as through scribbles, letter-like forms, letters, words, phrases, and sentences.

Young children gather ideas for their drawings and writing from their own lives. They draw and write about their everyday and special activities, family and friends, stories that have been read to them and/or that they have seen on media, and content they are learning at home and in school (e.g., plants, weather, recycling, etc.). They are also influenced by the thoughts and interests of their peers. As they see their friends draw and write about trucks, they, too, might become interested in drawing and writing about trucks. In addition, adults may have an effect on what children draw and write. For example, children whose family members write letters or emails to friends might decide to write their own letter or email. Likewise, children whose teachers model writing about the plants growing in the classroom might develop an interest in writing about the plants.

As they write and share, interactions with their peers may prompt children to revise their plans. For example, one day, Richelle decided she was going to write about swimming and had started to draw a picture of a swimming pool. As she

drew, she noticed Arzu was busy writing invitations to a party. This new idea intrigued her. After a brief conversation with Arzu, Richelle decided to revise her writing plans to include writing an invitation for Arzu to go swimming with her.

Young children also revise and edit as they write (Kidd et al., 2014). Revisions can occur while writing or can be details that are added, deleted, or changed at a later time. For example, a child might add more details to a story as he looks at his picture and realizes there is more to say or might decide to take his sister out of the story because he remembered he was mad at her. A child could also change her mind and decide that the ball is blue rather than red or that there are two balls rather than one. Children's revisions are often influenced by their peers and adults as they interact with the writing. For example, once Richelle decided to write an invitation, she added Arzu to the picture of the pool. Using letter-like forms and some letters, she wrote, "Will you go with me?" After looking at her picture, she added additional writing to include "to the pool." As she read her invitation aloud, Hasan interjected that he wanted to go, too. He then said that she needed to say which day or they would not know when to go. Richelle added "on Saturday" to her writing and added a picture of Hasan in the pool with them. After she shared the invitation, Ms. Daryl mentioned that an invitation usually includes what time she wants her friends to meet her. Richelle added a time to her invitation. Through these interactions, Richelle gained important insights into revising her writing.

Young children also learn about editing as they write and interact with others. Edits occur as children make corrections to their writing. This might happen when a child notices that he drew two cars and then adds an s to the label "car" to convey that there is more than one car. Editing also occurs when a child, like Arzu, remembers that her name begins with a capital letter and changes the lowercase a to a capital A. Interactions with peers and adults can also prompt

children to edit their writing. For example, a child who is applying his knowledge of letter-sound relationships to sound out words might notice one of the words in his writing is posted on the wall. When he realizes that he is missing a letter in one of his words, he might add the missing letter to the word or may cross out or erase the word and copy the correct spelling. As children make edits to their writing, they gain understandings about the conventions of writing as well as come to understand editing as an important process in writing.

9.3c Handling Writing Tools

Using writing tools helps children develop writing proficiency.

As young children interact with their literate world, they begin to explore a variety of writing tools, including paper, crayons, markers, pens, and digital writing tools such as phones and touchscreen tablets (Rowe, 2018). Their handling of writing tools becomes more proficient as their fine motor skills develop. Initially, young children have limited motor strength and control and, therefore, tend to grasp writing tools with their whole hand to make marks (see Table 9.3). As their motor skills develop, they may use their whole arm in an effort to control and direct their markings, scribbles, and drawings. Eventually, they use their fingertips to grasp the writing tool but their grip may be too high or too low. Likewise, it might be too loose or too tight. As they show increased fine motor strength and control, they are able to use three fingers to grip their writing tools to produce letters, words with invented spelling, and memorized words.

Table 9.3 Continuum of Emergent Reading Development: Handling Writing Tools

Handling Writing Tools

Developmental Progression	CLLD3.3 Handling Writing Tools
Early Infancy 0-8 months	
Later Infancy 6-14 months	• Begins to grasp writing tools to make random marks on a paper with limited control over results (CLLD3.3a) • Begins to use a whole hand grip to manipulate the writing tool (CLLD3.3b)
Early Toddler 12-24 Months	• Uses the whole arm to control and direct the scribbles, marks, drawing, and writing intentions (CLLD3.3c)
Later Toddler 22-36 Months	• Attempts to use their fingertips to grip writing tools, finger grip may be loose or too tight and finger positioning may be too high or too close to the tip (CLLD3.3d)
Early Preschool 34-48 Months	• Begins to show increased fine motor strength in writing (CLLD3.3e) • Becomes more skillful with a variety of writing tools (e.g., markers, pens, pencils, crayons, chalk) (CLLD3.3f)
Later Preschool 44-60 Months	• Begins to use a comfortable and efficient three-finger grip to control a variety of writing tools (CLLD3.3g) • Uses a variety of digital tools to write or draw (CLLD3.3h)

Table 9.3 is from Virginia's Early Learning &

Similarly, many children are able to point and use their forefingers to make marks, draw, and scribble when using a touchscreen tablet (Crescenzi et al., 2014). As their fine motor skills develop, children use their fingers or a stylus on a touchscreen tablet to write letters, words with invented spelling, and words that are memorized (Rowe & Miller, 2015). Young children also learn to produce typewritten text, including their names, repeated letters, and words with invented spelling (Rowe & Miller, 2015). Digital tools also allow children to draw, use photographs and imagery, and record oral stories as they write (Eutsler et al., 2020).

As children experiment with and use a variety of writing tools and engage in daily opportunities to write and interact with peers and adults, they gain valuable insights into writing as a way to communicate ideas, stories, information, and opinions. At the same time, they develop important writing skills as they progress from making marks to using invented spelling and memorized or copied words to writing words, phrases, and sentences. As can be seen by the children in Mr. Jenbere's and Ms. Daryl's classroom, development along the continuum is individual. Accordingly, educators play an essential role in shaping an environment that promotes young children's writing.

9.3d Factors That Influence Writing Development

Although developmental trajectories like those presented in the three tables representing the continuum of emergent writing development (Tables 9.1, 9.2, and 9.3) help educators understand how children develop their writing knowledge and skills, there are a number of factors that influence a child's

specific developmental pathway that must also be considered. As noted in previous chapters, children's literacy development is shaped by (a) their home, community, and school environments; (b) the experiences children have with oral and written language within these contexts, including the languages they hear and speak; and (c) individual differences influenced by their unique abilities, developmental delays, and disabilities. The multiple influences on children's development, including their literacy development, are important to keep in mind when examining individual children's writing development and planning for appropriate assessment and instruction.

Similar to previous discussions about children's language and emergent reading development, children's prior knowledge, experiences, and interests contribute to variances in children's writing development (Burns & Kidd, 2016). Children learn a lot about how print works as they interact with their world. Therefore, children's experiences at home, in the community, and at school influence their writing knowledge and skills. Children interacting with a language- and print-rich environment will have different experiences with print than children who have limited access to print in their everyday lives. For example, children immersed in an environment with rich traditions of oral storytelling and/or daily storybook reading may have well-developed vocabularies in one or more languages and valuable understandings of story structures that they can apply to their own writing. Likewise, children who observe and take part in written communications at home, in their community, and at school develop insights into the functions of writing that help them understand that there are different purposes and types of writing as well as different audiences for their writing. In addition, children who are provided opportunities to explore writing tools and are encouraged to integrate writing into their play may develop

an interest in writing and may be motivated to use writing throughout their day.

Children's writing development is also influenced by the language or languages used in their home, community, and school. Children who are monolingual and those who are acquiring two or more languages may progress in different ways (Soltero-González & Butvilofsky, 2020). Young children who are acquiring two or more languages develop understandings about how print works as they encounter print in more than one language. For example, children who are simultaneous bilinguals are acquiring two languages at the same time and are learning about print in both languages. As their understandings of print emerge, they use what they know about print in one language to inform their understanding of print in the other language. This means that, when they begin to write, their understandings of print across both languages inform their writing in both languages (Soltero-González & Butvilofsky, 2020). Because patterns of development may differ by language or languages spoken, it is important to recognize there may be differences in writing trajectories among children who are monolingual, bilingual, and multilingual. Differences among languages and children who speak one, two, or more languages are especially important for educators to recognize when children begin to use their vocabularies and knowledge of letters and sounds to write.

Educators must also be aware of the effect that children's abilities, developmental delays, and disabilities may have on children's emergent writing development. Differences in how young children interact with and explore the world can affect the experiences they have to develop writing knowledge and skills. For example, young children with developmental delays and disabilities often have numerous doctors' visits, therapy appointments, and other routines that take the family's time and energy. The challenges and stress families may face as they navigate their child's care and appointments

may affect the opportunities children have to engage in literacy experiences (Hanser, 2010). Similarly, the nature of the developmental delay or disability may have an effect on how the child is able to engage in literacy-rich opportunities. For example, children who are sensitive to touch may not want to experiment with writing tools or children with short attention spans may not sit long during storybook reading (Hanser, 2010). In addition, children who use a wheelchair might be limited by what is in their line of sight and might not see environmental print that others might see (Hanser, 2010). Likewise, children with visual impairments can also be affected by how easy or challenging it is for them to access print in the environment (Guerette, 2014).

The type of developmental delay or disability may also have an impact on children's emergent writing development. Children with specific language impairments, developmental delays, learning disabilities, or high-functioning autism might develop writing skills at a different pace (Burns et al., 2010). Children who are deaf and hard-of-hearing often begin school with less fully developed emergent writing skills than children who are hearing (Werfel, 2017). In addition, children with specific writing disorders might have challenges performing the motor activities required to hold a writing tool and write (Burns et al., 2010).

Because young children come to school with varied backgrounds and experiences, it is important for educators to recognize the writing knowledge and skills children bring with them to school. They must understand that children's experiences with oral and written print differ from child to child. Many children come to school with rich experiences that foster their emergent writing knowledge and skills. Other children may come to school having had limited opportunities to hear stories, observe writing, and explore writing in their daily lives. In addition, children might have developmental delays and disabilities that influence their access to oral and

print language or affect the pace at which they develop and learn. Recognizing the differing experiences and abilities children bring to the classroom allows educators to build on existing knowledge and skills to promote positive writing outcomes.

9.4 Nurturing Emergent Writers

Educators play an important role in nurturing emergent writers, especially when they work closely with family members to engage children in meaningful and relevant writing experiences. By getting to know children's cultural and linguistic backgrounds and tapping into their prior knowledge and experiences, educators can implement culturally responsive assessment and instructional practices that promote children's writing development. Therefore, educators support young children's writing development by engaging families, assessing and monitoring young children's writing, and providing developmentally and culturally appropriate writing instruction.

9.4a Engaging Families Through Writing

Working with and learning from children's families helps educators understand and capitalize on the diversity children bring to the classroom. When educators have deep understandings of their children's cultures, languages, and abilities and disabilities, they are able to design inclusive

environments and engage children in culturally responsive writing assessment and instruction (Kidd & Burns, in press). By valuing each family's unique experience and each child's interests and abilities, educators create equitable opportunities for learning. Educational equity occurs when differences as well as similarities among children and their families are celebrated and children's lives are reflected in positive and authentic ways in their learning experiences (NAEYC, 2019). Authentic writing opportunities that encourage connections between home and school and promote respect for children's unique experiences foster a positive learning environment in which children's development is optimized. When educators integrate authentic writing into the classroom and encourage children to write about their families and their everyday lives, they gain deeper understandings of children's cultural and linguistic experiences.

Collaborating with families also ensures that the learning experiences in the classroom build upon and connect to children's prior knowledge, experiences, and interests (Burns & Kidd, 2016). When educators tap into home writing practices, children are able to connect new learning to what they already know. For example, when educators know the types of writing that occur at home (e.g., grocery lists, notes to other family members, emails, text messages), they can incorporate opportunities to engage children in similar types of writing during instructional lessons and play experiences. Likewise, when children and families share stories about their family members, traditions, and their daily activities, the richness of their family and cultural experiences emerges. Their stories provide educators with insights that ensure children's families, cultures, and languages are valued and recognized in the classroom.

In addition, by engaging families in writing activities that bridge home and school, educators provide opportunities for children to write about topics that are familiar to them.

Young children are proud of their family and culture and love to share their experiences through their writing. Educators build on children's natural interest in their family by creating opportunities to write about their families both at school and at home. In the classroom, educators often prominently display family photos taken during home visits or sent in by families. These photos encourage children to talk and write about their family. When the writings are taken home, they are shared with family members. Likewise, children and families may engage in writing projects at home and then bring their writing into school to share with their classmates. These home-school connections strengthen authentic bonds among children, families, and educators, which contribute to an inclusive learning environment and culturally responsive assessment and instruction practices.

9.4b Assessing Emergent Writers

Young children's writing is a window into their thinking and understanding of the world. When educators take time to observe children as they write, talk with them about their writing, and examine the writings they produce, they gain valuable insights into children's prior knowledge, experiences, and interests as well as their emergent writing knowledge and skills (Kidd et al., 2014). Educators use assessment data from formal and informal assessments to inform instructional decisions, evaluate their curriculum and instructional practices, and access services and resources for children (Kidd et al., 2019; National Research Council, 2008). For example, educators may use formal assessments that include writing components, such as the *Transdisciplinary-Based Play Assessment (2nd ed.)* (Linder, 2008), to develop learning goals, make instructional recommendations, monitor children's progress over time, and determine eligibility for instructional services. They may also use assessments specifically developed to evaluate emergent

writing that can document growth over time. For example, the *Write Start! Writing Assessment* can be used to document children's writing forms, directionality, intentionality, and the content of the message (Rowe & Wilson, 2015).

As discussed in Chapter 6, assessing and monitoring young children's literacy development is important to foster positive learning outcomes for young children. Although formal assessments can be helpful, most assessment practices in the early years are ongoing, informal assessments used to monitor progress and make decisions about curriculum and instruction. The information educators gather as they observe and intentionally interact with children as they write provides an assessment of what children can do. It also sheds light on the instructional supports and scaffolds needed to continue developing their emergent writing knowledge and skills. Assessing young children's emergent writing is especially important for making instructional decisions that build on children's interests, knowledge, and skills. Therefore, effective assessment must be as open ended as possible to allow children to express their ideas and demonstrate their understanding. Authentic creative writing experiences guided by children's interests spark the unique abilities in all individuals. It is through open-ended and authentic assessments that the effective educator guides development.

Pause and Consider: Assessing Writing

In the opening vignette, after Richelle shared her thank you note with Mr. Jenbere, he paused to jot down anecdotal notes based on what he observed. He

noted that Richelle views herself as a writer and seems to understand that writing has a purpose and an audience. She understands that a thank you note is written to show appreciation for something someone did. He also noted that although she mostly used letter-like forms, she was beginning to incorporate some letters into her writing. However, the letters did not correspond to the sounds in the words she read.

Later in the day, Mr. Jenbere and Ms. Daryl met to go over their notes. They both noticed that many of the children enjoyed writing thank you notes and understood their purpose. They decided to add folded cardstock and envelopes to their writing center, so children could make thank you notes or other cards on their own. They planned to introduce the new materials to the children the next day and invite those who wish to make cards to visit the writing center in the next few days. They also talked about what they noticed about individual children's writing. For example, they discussed how to capitalize on Richelle's new interest in writing alphabet letters in addition to letter-like forms. They decided to provide intentional opportunities for Richelle to use letters in her writing during centers. They checked to make sure there were writing pads and writing tools in each center, so they could integrate the activity into the context of Richelle's play.

- How did Mr. Jenbere and Ms. Daryl assess their children's writing?

- How did they use what is known about children's writing progressions in their assessments?

9.4c Instructional Practices for Emergent Writers

The early years are an important time for educators and families to provide young children with experiences that develop not only letter-sound correspondence and handwriting skills, but also their understanding that print is read and writing is a way to communicate their ideas (Gerde et al., 2012). As discussed in previous chapters, there are many ways adults can support children's literacy development, and specifically, their writing development. Through intentional and explicit opportunities to develop children's writing knowledge and skills throughout the school day and at home, families and educators support children as they become proficient writers. These opportunities are provided when educators (a) create an environment that supports writing; (b) build on children's prior knowledge, experiences, and interests; (c) integrate writing into play; (d) infuse writing across the curriculum; and (e) provide diverse instructional writing experiences (see Table 9.4).

Table 9.4 "Instructional Practices That Support Writing"

Instructional Practices That Support Writing

Create an Environment That Supports Writing

- Create uncluttered places with plenty of room for children to write and move around, keeping in mind that children are learning to regulate their bodies and are developing motor skills.
- Have tables and chairs that are the appropriate size and include space for children in wheelchairs and other positioning equipment.
- Provide a variety of writing materials and tools, including paper, dry erase boards, chalkboards, markers, crayons, pencils, chalk, tempera paint, water colors, finger paints, touchscreen tablets, styluses, and computers.
- Place writing materials and tools in places that are easy to reach and easy to put away, such as carts, shelves, tables, bins, and cubbies at the children's level.
- Display meaningful print with pictures or braille around the room, including name strips, labels, posters, word cards, sentence strips, morning messages, and daily schedules.
- Position print and braille so it is visible and easy to reach.
- Include print and braille materials and writing tools in centers (e.g., children's literature and magazines in the library, menus and writing pads in the restaurant, envelopes and writing paper in the post office, paper and crayons in construction areas)
- Display children's drawings and writings.

Build on Children's Prior Knowledge,

Experiences, and Interests

- Engage families in children's writing experiences.
- Encourage children to use their home languages and write about their home culture and family experiences.
- Ask children to draw and write about what they already know about topics of interest.
- Provide experiences that children can include in their writing, such as nature walks, field trips, hands-on experiments, class visitors, and experiences with community helpers (e.g., talking with firefighters and seeing a firetruck).
- Provide choice of writing tools and topics.

Integrate Writing Into Play

- Include accessible spaces for writing and writing materials and tools in each center.
- Model and explain how writing materials and tools may be used in the center.
- Remind children periodically to use writing materials and tools in the centers.
- Introduce new writing materials and tools into centers regularly.
- Include examples of different types of writing in the writing center, such as models of birthday cards or "I love you" notes to family members.
- Post theme-related and frequently used words in the writing center and around the room.

- Encourage children to copy words posted around the room and words written on cards or sentence strips in the writing center into their writing.
- Encourage children to write play plans that not only indicate where they plan to play (e.g., the kitchen center) but also how they plan to play (e.g., how they plan to share toys and props with classmates or what toys, props, and materials they plan to use).
- Provide intentional, child-specific scaffolding and reinforcement of writing knowledge and skills when interacting with children in centers.
- Follow the child's lead when interacting with the child to provide scaffolding and instruction.

Infuse Writing Across the Curriculum

- Provide opportunities for children to write about what they are learning across the curriculum, including in mathematics, reading, science, and social studies.
- Incorporate writing activities that activate children's prior knowledge (e.g., asking them to write about a topic, such as spring or fall, before instruction).
- Encourage children to draw and write about curricular content to foster their learning (e.g., documenting the growth of a plant, writing about sharing, comparing concepts such as hot and cold).
- Use children's drawings and writing to assess their content knowledge (e.g., examining children's drawings to assess their understanding of shadows or their writing to assess what they know about recycling).
- Provide opportunities for children to share and talk about their drawings and writing with adults and peers.

**Provide Diverse instructional Writing
Experiences**

- Schedule time for writing instruction and provide opportunities throughout the day to write independently and with support.
- Encourage children to use a variety of writing materials and tools when writing, including digital tools such as touchscreen tablets and computers.
- Provide authentic writing experiences that develop children's understanding of writing as a means to communicate with an audience (e.g., a story to share with classmates, a card to share with a family member, a note to persuade a parent to not make cooked carrots for dinner, an invitation for a community helper to visit their classroom).
- Include opportunities for children to identify and write their name by signing in for attendance, signing off when completing a task like toothbrushing, or signing up for a responsibility on the jobs chart.
- Model writing by engaging in shared writing experiences.
- Scaffold children's writing through intentional interactions that develop their writing knowledge and abilities.
- Accept and encourage all forms of writing (e.g., scribbles, letter-like forms, letters, invented spelling).
- Encourage children to use letter-sound correspondence to write words with invented spelling.
- Ask children to read their writing or dictate their story and write down what they read.
- Promote children's interactions with peers as they write.
- Provide opportunities for children to share their writing with others.

When educators create environments and provide instruction that foster young children's emergent writing, children develop valuable knowledge and skills that prepare them for future success in school as well as in their daily lives. Assessment and instructional practices, like the ones listed in Table 9.4, are examples of the types of experiences educators provide to support young children's writing development. As educators make decisions about curriculum, assessment, and instruction, it is important that they consider each child's unique culture, languages, interests, and abilities. By being mindful of the diversity children bring to the classroom, educators provide an inclusive environment where each child feels valued and capable of learning.

Key Take-Aways

Young children develop understandings about writing as they experience the world. At home, they gain valuable insights into how writing is used to communicate. They also begin to develop writing habits and skills and learn to handle writing materials and tools. Young children bring these understandings and skills with them as they enter early care and education settings. When educators and family members work together, they use what they learn from each other to provide opportunities for children to continue to develop their writing knowledge and skills. This relationship between educators and families helps educators build on children's prior knowledge, experience, and interests as they provide culturally responsive and individually appropriate instructional

writing experiences. As educators plan assessment and instruction, they recognize that understanding typical writing progressions is important, but are also mindful that children's development varies. Therefore, educators consider the diversities children bring to the classroom when they create an environment that fosters writing development and integrates writing opportunities across the school day. When writing is an important part of their everyday lives, children develop writing knowledge and skills that prepare them for future literacy experiences. These experiences also give children a voice as they engage in writing as a way to navigate their world.

Additional Resources

Promoting Preschoolers' Emergent Writing: https://www.naeyc.org/resources/pubs/yc/nov2017/emergent-writing

Virginia's Early Learning & Development Standards (ELDS): Birth-Five Learning Guidelines. https://www.doe.virginia.gov/early-childhood/curriculum/va-elds-birth-5.pdf

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10. Planning for What's Next as Emergent Readers and Writers Progress

With Christopher Kidd

"Literacy is a journey, not a race."

-Bonnie Hill Campbell

10.4 Language and Literacy Assessment and Instruction Practices in the Primary Years

Opening Vignette: What's Next for Nukilik

Nukilik just turned 5-years-old in January and has started showing increased literacy proficiency. Ms. Ling reflects on her assessment data on Nukilik's language and literacy growth over the past 5 months and feels that he is moving out of the emergent phase of literacy development and is ready to learn new skills. Ms. Ling has noticed that Nukilik can write his name with ease, draw detailed stories, and write words using invented spelling and some conventional spelling. He writes sentences and will add a sentence when asked questions that help him think about additional details. He is beginning to write about a variety of topics and recently realized that he could entertain his classmates with his make-believe stories. He draws from the books that are read to him to get ideas for his stories.

Ms. Ling has observed that Nukilik holds books correctly and is often seen with a book in the library area. When she reads with him, she has noticed an increase in the number of words he recognizes by sight and that he is attempting to decode some phonetically regular words. During read alouds, Nukilik is becoming more adept at predicting what comes next and is eager to answer questions that Ms. Ling poses to the

class. Ms. Ling can also tell that he is becoming more proficient at retelling stories and sharing information from nonfiction texts. She often finds him engaged in dramatic play based on a book she recently read aloud. He has also become quite a conversationalist and enjoys talking with classmates. Ms. Ling has noted that he has started to use increasingly correct grammar when speaking English and is attempting to use vocabulary from the books she reads to the class in his conversations. He also continues to speak in his home language, especially during play, and incorporates words from his home language into his writing.

Ms. Ling is excited about the way Nukilk is using language and how his reading and writing are developing. She recognizes that she can foster continued growth by providing challenging and engaging learning experiences for Nukilik. Based on her assessments of his language and literacy progressions, Ms. Ling realizes that Nukilik is transitioning from emergent to conventional literacy. She knows that she needs to prepare for what comes next for Nukilik to nurture his continued growth.

10.1 Introduction

As children are provided opportunities at home, in the community, and at school to engage in language- and literacy-rich experiences, their literacy knowledge and skills continue to develop. The literacy skills they develop from birth through their prekindergarten years provide a foundation for the development of the conventional literacy skills children need

as they become more proficient readers and writers (NELP, 2008). The National Early Literacy Panel (2008) identified conventional literacy skills as "decoding, oral reading fluency, reading comprehension, writing, and spelling" (p. vii). As discussed throughout this textbook, educators play an important role in developing young children's oral language, emergent reading, and emergent writing development. Educators are also instrumental in meeting children where they are and ensuring that they continue to make positive progress along the developmental continuum, including children who may be progressing in advance of their peers. Therefore, it is important for educators to understand what is next as emergent readers and writers progress. When educators know what is next, they are better able to plan and implement assessment and instruction that promotes children's oral language development and supports the development of conventional literacy skills. Therefore, this final chapter will explore the following ideas:
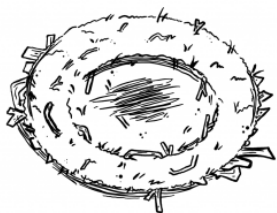
How do young children develop an understanding of language and literacy during their later prekindergarten and early primary years?

How do young children progress as they become more proficient readers and writers?

What can early childhood educators do to support young children as their language and literacy knowledge and skills continue to develop?

10.2 Language- and Literacy-Rich Environments

Children continue to develop their literacy skills as they move into school-age years.

Language- and literacy-rich home, community, and school environments continue to be important as children transition from their prekindergarten years to their kindergarten and early primary years. At home and in the community, children continue to observe and engage in language and literacy events that develop their oral language and conventional literacy skills. As their language skills progress, they become more active participants in the

conversations that surround them. This, in turn, supports the further development of their vocabulary and conversational skills, especially in the languages spoken at home and in the community. Likewise, as children become increasingly more capable of reading print in their environment, they might read an "I love you" text from a grandparent, a birthday card from a neighbor, or the title of a favorite television show or movie. In addition, books and e-readers play an important role in their language and literacy development as they listen to increasingly more complex texts and begin to read books independently. At the same time, children's writing skills become more conventional, which enables them to use writing as a means to make notes to themselves and communicate with family and friends. For example, children might write a reminder about the topic of books they want to check out from the library (e.g., dinosaur books) or create a poster for their door with their name showing ownership of their room (e.g., Clara's room). They might also create lengthier compositions, such as a story, like the make-believe stories Nukilik shares with his classmates, or information about a topic of interest to share with others.

Similar to their younger years, children come to school enriched by these home and community language and literacy experiences. Educators build upon and add to these experiences by creating a classroom environment that values children's diverse linguistic and cultural backgrounds and provides meaningful opportunities to engage in language and literacy activities. As children transition from prekindergarten to kindergarten classroom contexts, exposure to rich language and literacy environments continues to be important. Children need opportunities throughout the day to express their ideas orally and in writing and to interact with diverse texts. Print-rich environments, access to a plethora of texts, and experiences writing for a variety of purposes work in complementary ways to support children's early literacy.

10.3 Next Steps in Language and Literacy Development

As children transition from prekindergarten into kindergarten and the early elementary years, their language and literacy knowledge and skills continue to develop. Their communications become more complex, and they become increasingly more proficient at speaking, listening, reading, and writing. It is important for early educators to have an understanding of what the next steps are in language, reading, and writing development as they assess children's progress and plan instruction for young children who are beginning to use conventional language and literacy skills.

10.3a Language Development

Language development in the early years is full of big headlines. Children begin with only the barest ability to communicate their needs by way of their reflexes, unconscious responses, crying, and expressing contentment. As they move through the earliest months and years, they develop greater motor ability in holding up their head, eye gaze, articulation, and using their body to communicate. They make leaps and bounds in their capacities in the early months and years whether verbal or non-verbal. They learn that they have a voice and can use it to share their thoughts or solve their problems. They engage in storytelling, sign language, and non-verbal language. These skills and abilities create and enhance their ability to engage socially in their world.

As children move into the school-age years, they begin to further refine their language development. Each of the parts of language becomes more fluid and adult-like. Their phonology is enhanced and children begin to pronounce their words with greater ease as their motor abilities progress. Children further learn grammar rules through self-correction, direct instruction, and supportive recasting. Their understanding of semantics grows over time as they start to distinguish between a teasing tone or the different meaning of a word in a different context. Children refine their ability to understand pragmatic rules of language as their social world expands, and they learn how to communicate differently in a variety of circumstances. Sebastian, who was introduced in Chapter 7 as crying out "Cabasasa" when he sees a pumpkin, will enhance his abilities in the preschool years and beyond. He eventually learns to say "calabaza" as his articulation (an area of phonology) improves. He will also expand his vocabulary and pronunciation as he learns the meaning and pronunciation of the word, "pumpkin." By the end of preschool, he can use calabaza and pumpkin interchangeably as his pragmatic understanding allows him to switch between languages. Moreover, he can use either word in grammatically correct sentences. Finally, Sebastian will be able to use either pumpkin or calabaza in a joke or in other ways that reflect greater maturity in his understanding of semantics.

The primary school years are focused on creating opportunities for children to practice skills they have already learned about productive and expressive language and to expand on these concepts. It is expected that children can communicate when they enter kindergarten. In their primary years, their informal conversational skills continue to grow as they interact with adults and peers (VBOE, 2017). They become more adept at initiating conversations, listening to others, taking conversational turns, staying on topic, and following the rules of conversation. They become more collaborative

conversationalists and talk about a variety of topics and texts as they converse and work with others. They use complete sentences as they talk and learn to use appropriate phrasing, intonation, and voice levels for the situation. They become more proficient at using direct requests to express their needs and at asking why and how questions to get and clarify information as well as to ask for help. In addition, they are better able to follow one- and two-step directions.

Educators also expect that children will possess a wider and deeper vocabulary at the end of that year. They become more fluid in expressing themselves and more adept at interpreting the messages of others. These increased understandings are fundamental to allowing children to know that they have a voice that can be shared orally or through their writing. This is also essential to helping children receive language through other people's thoughts, whether expressed by reading or by communicating through speech or other forms of communication, such as gestures and sign language.

Throughout their early years, children have made leaps and bounds in using symbolic thinking to learn how to communicate, whether verbal or non-verbal. They have learned to express themselves as they interact with books, media, and other print materials and engage in storytelling, dramatic play, choral and echo recitation, and other forms of verbal and non-verbal expression. They have learned they have a voice and can share those thoughts and understand those thoughts via oral literacy, sign language, and non-verbal language. These skills and abilities create and enhance their ability to engage socially in their world.

10.3b Reading Development

Children become more confident with their reading skills as they continue to learn and practice.

The transition from emergent reading to more conventional reading is an exciting time for young children, families, and educators. During this transition, children, like Nukilik, begin to use their knowledge of letter-sound correspondence to pronounce words more consistently. This is an important progression because being able to decode words contributes to children's oral reading fluency and their comprehension of the text. When children read fluently, they are able to read with speed and accuracy as well as with expression. Becoming proficient at decoding and more fluent when reading orally supports children's reading comprehension because they are able to focus their attention on constructing meaning rather than on the task of

recognizing words. Children comprehend text when they construct meaning as they read and make connections to their prior knowledge. They draw upon their existing vocabulary to understand what they read and develop new vocabulary as they encounter new words and concepts. Children's developing vocabulary, decoding skills, and oral reading fluency support their comprehension of text, which is the goal of reading (NELP, 2008).

As children read and write in prekindergarten, code-related instruction (i.e., decoding words when reading and encoding words when writing) emphasizes letter-sound relationships (Foorman et al., 2016). For example, children learn that if they see a "b," they should use a /b/ sound when reading. Likewise, when they hear a /b/ sound, they should write a "b." During the transition from emergent to conventional reading, educators place an increased focus on word parts and patterns in words instead of individual letters and sounds (i.e., onset/ rhyme and digraphs). In other words, children learn to apply what they know about a word pattern to another word. For example, a child might think, "I know the word 'hat' and this word starts with a 'c' so that says 'cat'." Instruction also begins to focus on sight words (i.e., words with irregular spelling patterns) and high-frequency words that are often found in text. In addition, children begin to develop understandings of the role of punctuation as they read and get better at tracking text (i.e., following down to the second line). In this phase, fluency is slow and reading is often word-by-word. As children begin to recognize words automatically and their sight word vocabulary increases, they become more fluent readers and are able to read with increased speed, accuracy, and expression.

Children begin to read simple, predictable text that includes picture supports and words they know. They begin using initial sounds in words when reading and use cross-checking strategies to confirm or disconfirm accuracy. For example, a child reads a word as "bear" but then looks at the

picture and says, "Oh wait...that says bird." Children also begin to use their decoding skills as they read text with words they are able to decode. And they use their sight word vocabulary to further assist their reading. Initially, children may read hesitantly. However, with practice, children become more confident in their skills and begin to believe, "I can read this book!"

During their transition to conventional reading, children begin to apply a variety of comprehension strategies that support their understanding of fiction and nonfiction text (VBOE, 2017). They learn to relate what they are reading to their prior knowledge and previous experiences in order to link their new learning to what they already know. Like Nukilik, they use their prior knowledge, pictures, and text to make predictions about what is going to happen. They also ask and answer questions about the text. In addition, they retell the beginning, middle, and end of familiar stories using story elements, such as the setting, characters, and events. They use the text and pictures to talk about what happens in the story, the characters' feelings, and the problem of the story. In nonfiction text, they use text features, including pictures, the title, and headings, to get information when reading. As they read, they are able to identify information that is new to them and talk about what they read. In addition, they create mental images of what they read using words and pictures and share their visualizations with others.

The early primary years are crucial in the development of children's reading as they transition from emergent reading to more conventional reading. During this time, they are developing important decoding, oral reading fluency, and comprehension strategies and skills. They have learned to use decoding skills and sight words to recognize words as they read. They have developed their oral reading fluency as their word recognition becomes more automatic and they learn to read with speed, accuracy, and expression. Most importantly,

they are developing essential comprehension strategies that enable them to construct meaning as they read and apply the information in a variety of situations.

10.3c Writing Development

Figure 10.1 Example From a Developing Writer

Children's understanding of writing as a way to communicate continues to develop as children engage in a variety of language and literacy experiences. As they talk and listen, their vocabularies expand and they learn about the grammar and pragmatics of language. As they read, they gain greater insights into how text works and how authors communicate their ideas through printed text. Children draw upon their expanding vocabulary and their more nuanced knowledge of how print works as they write for a variety of

purposes and a range of audiences. A rich vocabulary helps them find just the right words as they write to express ideas, tell stories, share information, and convey opinions. When given opportunities to make decisions about what to write and how to write, they expand their conceptions of authorship and further develop their voice as well as their identity as writers (Kidd et al., 2014).

While writing, children, like Nukilik, use their knowledge of the relationship between letters and sounds to write (encode) words using invented spelling (See Figure 10.1). As their writing progresses, children use more conventional spelling, including phonetically spelled words and sight words (VBOE, 2017). Eventually, they begin to spell most words correctly. At the same time, children become more adept at following the conventions of writing (i.e., capitalization, punctuation, and grammar). They begin to compose simple sentences, including statements, questions, and exclamations, that begin with a capital letter and end with a punctuation mark. They also begin to use capital letters for names. Children's handwriting becomes more proficient as their fine motor skills develop. They print capital and lower-case letters of the alphabet. When they write in English, they write from left to right and from top to bottom. In addition, they begin to use appropriate spacing between words and sentences. Their writing becomes longer and more complex as they become more proficient writers.

Children also gain a deeper understanding of writing as a process and become more skillful at planning, drafting, revising, editing, and sharing their writing (VBOE, 2017). They begin to differentiate drawing and writing and use their drawing and other planning strategies to intentionally plan their writing. For example, children often draw a picture at the top of the paper to generate ideas for their writing and then use what they drew to write words, phrases, and sentences underneath. They continue to generate ideas as they write and

talk about their writing. As they become more proficient, they revise their writing by adding descriptive words or additional sentences. For example, Nukilik drew a detailed picture of the playground that included him swinging on a swing set. He wrote, "I played on the swing." When he shared his story with Ms. Ling, she asked, "What was it like to swing on the swing?" Nukilik thought about it and said, "It was fun." Ms. Ling encouraged him to add that detail to his writing. He revised his story by adding, "It was fun. I liked feeling the wind." Children also begin to edit their writing to correct spelling and to conform to writing conventions. For example, a child might change a period to a question mark after remembering a question needs a question mark. At this time, sharing their writing with others is an important part of the process.

Children begin to expand their writing as they become more proficient writers. During the primary years, they continue to write about their family experiences, but also begin to write more make-believe stories modeled after the books adults are reading to them or they are reading themselves. For example, a child might write about a story about a magical pony or a superhero adventure. Opportunities to write across the curriculum also increase as children write to share information in language arts, mathematics, science, and social studies. For example, children might engage in recording plans for a science experiment, documenting the growth of plants in their classroom, sharing facts about animals, explaining why it is important to take turns, or convincing others to recycle. They also use writing to show their understanding of what they have read and learned across the curriculum. For instance, when children write about the difference between hot and cold, they are showing their understanding or misconceptions of what they are learning about temperature (see Figure 10.2).

Figure 10.2 Today is a Hot Day

As children transition to more conventional writing, writing becomes a vehicle for communicating their ideas with others. During the primary years, children gain a greater understanding of writing as a powerful tool for communicating. They develop their identity and voice as writers. Children understand that, as authors, they have ownership of their writing and can write for a range of purposes and a variety of audiences. In addition, they become more proficient at engaging in writing processes, conforming to written conventions, and using conventional spelling. Their handwriting and use of digital tools, such as touch tablets and computers, also develop considerably during this time. When given meaningful, authentic opportunities to write during the primary years, children can not only develop their writing proficiency, but also their enjoyment of and motivation to write (Graham et al., 2018).

10.4 Language and Literacy Assessment and Instruction Practices in the Primary Years

Early educators in kindergarten and the early primary grades continue to integrate the ongoing assessment practices described in Chapter 6 and the instructional practices described in Chapters 7, 8, and 9. As children progress, they build upon these practices by integrating additional assessments that help them capture and document children's growing knowledge and skills. They use what they learn from these assessments to adapt their instructional practices to move children toward conventional reading and writing.

Informal assessment practices remain essential in documenting the children's early literacy expressions. Educators also begin incorporating additional literacy assessments into their instructional routines. Formal assessments like the Developmental Reading Assessment (Beaver & Carter, 2019) and PALS (Invernezzi et al., 2004) continue to offer insight into children's progressing literacy skills, including specific information regarding children's increasing language expressions, phonological awareness, vocabulary knowledge, comprehension, linguistic fluency, and writing. Educators continue to use formal and informal assessments in complementary ways to create holistic understandings of children's literacy growth. In turn, assessment remains an important practice shaping early educators' curricular decisions and the literacy opportunities children experience

As children's language and conventional literacy skills

develop, educators and families continue to play an important role in providing children with learning experiences that promote their language and literacy development. To enhance development, educators assess their children and learn more about their strengths and needs. They then use the information they gather to plan and implement instruction intentionally designed to develop children's language and literacy knowledge and skills throughout the school day and at home. By providing instruction that supports individual children's language and literacy progressions, educators ensure that each child has opportunities to continue to develop their language and literacy knowledge and skills. These opportunities are provided when educators (a) create an environment that supports reading and writing; (b) build on children's prior knowledge, experiences, and interests; (c) integrate reading and writing into play; (d) infuse reading and writing across the curriculum; and (e) provide diverse instructional reading and writing experiences (see Table 10.1).

Table 10.1 "Language and Literacy Instructional Practices in the Primary Years"

Language and Literacy Instructional Practices in the Primary Years

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Create an Environment That Supports Language and Literacy

- Create inviting and accessible spaces for children to read, write, and communicate with each other.
- Provide a variety of reading and writing materials that reflect children's diversities and encourage curious exploration.
- Display children's writings and expressions prominently.
- Provide children access to nonfiction and fiction text materials.

Build on Children's Prior Knowledge, Experiences, and Interests

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- Engage families in children's literacy experiences.
- Encourage children to use their home languages and integrate their home culture and family experiences into the classroom.
- Access children's funds of knowledge by incorporating activities that activate children's prior knowledge.
- Provide experiences that promote conversation and provide authentic reasons to communicate, read, and write.

Provide Diverse instructional Language and Literacy Experiences Across the Curriculum

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- Schedule time for reading and writing instruction and provide opportunities throughout the day for children to read and write independently and with support.
- Provide opportunities for children to talk, read, and write

with others.

- Model language, reading, and writing by engaging in shared literacy experiences, including read alouds, shared reading, shared writing, and conversations.
- Create authentic purposes for children to read,write, and communicate for a variety of purposes.
- Provide explicit instruction as well as opportunities for children to explore language, reading, and writing.
- Scaffold children's language and literacy development through intentional interactions that develop their language and literacy knowledge and skills.
- Provide opportunities for children to use listening, speaking, reading, and writing to learn content across the curriculum, including in mathematics, reading, science, and social studies.
- Use children's conversations and writing to assess their content knowledge.

Key Take-Aways

Children's capacity to communicate, read, and write develops over time. Enriched environments, intentional instructional practices, ongoing assessment, and collaborations with families and other educators ensure children's continued growth. Educators continue to play an essential role in nurturing learners' literacy expressions throughout the primary years.

Improving Reading Comprehension in Kindergarten Through 3rd Grade: A Practice Guide (NCEE 2010-4038): https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/readingcomp_pg_092810.pdf

Teaching Elementary School Students to be Effective Writers: A Practice Guide (NCEE 2012- 4058): https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/WWC_Elem_Writing_PG_Dec182018.pdf

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