



New York State  
**EARLY  
LEARNING  
GUIDELINES:**

A Child Development Resource for Educators  
of Children Ages Birth Through Eight



New York Works for Children is New York State’s integrated professional development system for the early childhood and school age workforce. Our mission is to positively influence outcomes for young children and families through the development of a skilled, knowledgeable, well-compensated, and committed early childhood education work force.

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Dear Colleagues,

It is our pleasure to bring this publication to you in support of your practice with or on behalf of New York's young children and their families. The Early Childhood Advisory Council (ECAC) is committed to realizing the vision that *all young children are healthy, learning, and thriving in families that are supported by a full complement of services and resources essential for successful development.*

We see the publication and dissemination of the **New York State Early Learning Guidelines** as a critical step in moving closer to the ECAC's vision. Understanding child development is key to supporting the well-being of children. When you understand child development, you will be able to anticipate developmental changes, have reasonable expectations of children's behavior, act with empathy and provide support.

The best early childhood educators are always learning and developing their skills. The New York State Core Body of Knowledge: Core Competencies for Early Childhood Educators, describes the knowledge, skills and dispositions you need to work with young children. The Early Learning Guidelines are designed for you to use in concert with the Core Body of Knowledge as a daily resource and reflection tool. The Guidelines provide information about developmental milestones and specific instructional, environmental and family engagement supports you can use to support young children's development and are an ideal companion to the state's early learning standards developed by the New York State Education Department.

The Guidelines are also aligned with strategies recommended by the Pyramid Model, an evidence-based framework for building the social and emotional competence of all early care and education settings. When you use the Early Learning Guidelines, you work toward the goals of the Pyramid Model by building nurturing and responsive relationships with children, creating high quality supportive environments and becoming more effective in your work.

It is important to make the distinction that The Early Learning Guidelines are not standards and cannot be used as a replacement for standards. Learning standards are goals for New York State students; they describe learning ideally intended to be accomplished by the end of each instructional year. New York State Education Department publishes learning standards and guidance documents for children in pre-K through 12th grade. The New York State Early Learning Standards were revised in 2017, and the Office of Early Learning published the consolidated Prekindergarten Learning Standards: A Resource for School Success, and the New York State Kindergarten Learning Standards: A Resource for School Success in 2019. You can find these documents and additional resources at <http://www.nysed.gov/curriculum-instruction>

Thank you for all that you do to support the success of young children and their families.

Patricia E. Persell  
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# New York Works for Children: The State’s Integrated Professional Development System

Well-educated and committed early childhood educators are among the most valuable resources that we can offer young children. Healthy development depends on the quality and reliability of children’s relationships with trusted adults. New York Works for Children’s (NYWFC) — the state’s early childhood professional development system — is designed to positively influence outcomes for young children and families through the development of skilled, knowledgeable, and committed early childhood educators.

New York Works for Children publications:

1

## The New York State Early Learning Guidelines

The NYS Early Learning Guidelines represent a child development resource for all early childhood educators working with children from birth through age eight, across all early learning settings. The Guidelines describe how children develop and provide strategies that educators can use to promote child development.

2

## The New York State Core Body of Knowledge: New York State’s Core Competencies for Early Childhood Educators

<http://earlychildhoodny.org/nywfc/cbk.php>

The NYS Core Body of Knowledge: New York State’s Core Competencies for Early Childhood Educators (CBK) outlines the knowledge, dispositions, and skills required to work with young children. The CBK describes the actions that educators can take to build meaningful relationships with children, families, and colleagues; create stimulating environments; and develop professionally in this incredibly important field.

The New York State Early Learning Guidelines provide a critical reference tool for trainers, coaches, and educators. The strategies suggested within the Guidelines are aligned with five CBK domains: (1) Child Growth and Development, (2) Family and Community Relationships, (3) Observation and Assessment, (4) Environment and Curriculum, and (5) Health, Safety, and Nutrition.

# Guiding Principles

To assure alignment, the Core Beliefs of the New York State CBK serve as the guiding principles for the New York State Early Learning Guidelines. These principles guide a shared vision of quality for early childhood educators in New York State.

- i. Children are born ready to learn.
- ii. Every human being is a unique individual, with diverse modes of learning and expression, as well as interests and strengths.
- iii. Children are worthy of the same respect as adults.
- iv. Children's needs for shelter and for physical, intellectual, emotional, and social nourishment must be met for them to grow, develop, and learn to their fullest potential.
- v. Children have the right to secure, trusting relationships with adults and to safe, nurturing environments.
- vi. Children learn through play.
- vii. Children construct their own knowledge based on their curiosity and driven by their interests. This active construction is facilitated by interaction with adults and other children.
- viii. Children's learning is active and follows a recurring path: awareness, exploration, inquiry, and application.
- ix. Children learn best when exposed to and engaged in high-quality environments, interactions, and relationships.
- x. Children learn best when adults in their lives work in partnership with one another.
- xi. Children and families of all ethnic origins, value systems, faiths, customs, languages, and compositions must be equally respected.
- xii. Families and children have the right to support systems that foster their growth and development.
- xiii. Teaching and learning are dynamic, integrated, and reciprocal processes.

# The Importance of Understanding Child Development

Early childhood educators' knowledge of child development is an important protective factor. Protective factors are conditions that improve the health and well-being of children and families and minimize harmful experiences. When educators understand child development, they are able to anticipate developmental changes, have reasonable expectations of children's behavior, act with empathy, and provide support. They respond more intentionally and feel confident of their ability to meet children's needs.

In order to understand children's development, educators must learn about the cultural values, beliefs, goals, and expectations of children's families. Educators who have a culturally grounded understanding of child development are able to make good decisions about how to extend children's learning.

## *The Importance of Understanding Development: Examples in Practice*

### Infancy Example

Knowing that babies need to move freely to develop their muscles and bones, educators create safe places for infants to play near caregivers and other children. Educators give infants, like Lucia, lots of time to lie on the floor so they can stretch, kick their legs, and reach for toys.

*Lucia (6 months) is lying on the floor on her blanket. Rolling over on her tummy, she spots a wooden ring nearby on the floor. She reaches for it, kicking her legs and stretching her arm out. Almost ... and then she gets it. She pulls the ring toward her, babbling the whole time. She rolls onto her back, looks at the ring, smiles broadly, and brings it to her mouth.*

Without this knowledge, an educator might keep infants in a swing or an infant seat that limits movement and development. Lucia wouldn't have had this experience, which gave her the chance to develop physical skills, be successful and competent, and learn a little more about her world.

### Toddler Example

If an educator didn't know that holding on to a special object helps some toddlers manage their feelings, they might tell families to keep objects from home out of the learning environment. When educators talk to families about what helps their children feel better when upset, they can facilitate familiar and comforting experiences to support toddlers' well-being.

*Jackson (28 months) misses his family during nap time. As he curls up on his cot, Ms. Lopez brings him the teddy bear his mother gave him. Jackson rubs the soft fur between his thumb and forefinger as Ms. Lopez sits nearby. He looks up at her and asks, "Mommy's coming after snack?" Ms. Lopez responds in a gentle voice, "Yes, she's coming to take you home after snack. She will be so happy to see you." Jackson smiles and drifts off to sleep, hugging the teddy bear.*

Without an understanding of child development or asking Jackson's mother's advice, the educator may not have allowed objects from home. Instead, she was able to create a reassuring and nurturing naptime experience that helps make the children feel safe, secure, and valued when they are at the program.

## Preschool Example

Preschool educators who know about child development understand that between the ages of three and five, it is typical for children to demonstrate a growing awareness of the body and its functions. Young children are often talkative and curious about everything, including their bodies and the bodies of others.

*Luda and Min (both 4 years old) are in the bathroom. When Luda starts to pee, Min asks, “Why doesn’t she have anything there? I have a wee-wee.” Their teacher takes a deep breath, gets down on Min’s eye-level, validates the child’s curiosity, and answers his question accurately. “That’s a good question, Min! Thanks for asking me. Some bodies have penises, like you, and some bodies don’t. Many boys have penises — that’s what we call a wee-wee at school — lots of girls have a vagina.”*

If the children’s teacher had not been equipped with an understanding of child development, they may have been surprised or alarmed by Min’s question. The teacher may have struggled to articulate an appropriate answer. Instead, the teacher in this scenario was able to respond calmly, using culturally responsive, gender-inclusive, and anatomically correct language.

## Primary Example

Knowing that primary age children often form groups of peers who share their cultural or linguistic backgrounds and that these peer groups provide a sense of belonging, educators affirm and create opportunities for children’s friendships.

*Juan (6 years old) joined Mr. Jones’ class in November. His family recently moved to New York from Guatemala, and he doesn’t yet speak English. Mr. Jones decided that Juan should sit beside Carlos and Maritza, who also speak Spanish at home. He hoped that this decision would help Juan to make friends in the new setting and that these new friends would help Juan find his way around the classroom and school. Mr. Jones also added more books in Spanish and books set in Guatemala, such as *Mama & Papa Have a Store* by Amelia Lau Carling, to the classroom library.*

Without understanding child development, Mr. Jones might have thought the most important task was for Juan to learn English and made sure he was grouped with English-speaking children. Instead, he was able to recognize the value of multilingual and social-emotional development. He created the foundation for Juan’s use of his home language as a resource for teaching and learning.

### In addition to understanding child development, protective factors for children include:

- Trusting relationships between children and families
- Social connections for families, such as extended family and friends
- Concrete support for families, such as housing and food
- Adult family members’ resilience, their inner resources, and coping skills
- The social and emotional competence of children

Protective factors mitigate the effects of Adverse Childhood Experiences (ACES). Educators can learn more about ACES and Protective Factors through Prevent Child Abuse NY.

<https://www.preventchildabuseny.org/>

The Social-Emotional Domain and the “ways the educator might support children’s development” sections throughout the Early Learning Guidelines include suggestions for ways in which educators might foster the development of these additional protective factors.

# Culture, Equity, and the Early Learning Guidelines

The Early Learning Guidelines define culture as a set of shared understandings or shared expectations. Culture fuels every aspect of every human's development. From the moment of birth, **all families** engage in childrearing practices designed to promote the healthy adaptation of the baby to social life in the community. Each family's cultural beliefs and values enable their children's development.

Childrearing practices reflect the family's worldview and are so deep and complex that they are often difficult to describe. For example, it may be easy to talk about the holidays a family celebrates, but harder to describe how a family believes people should cooperate in groups. The unconscious assumptions that make up each family's childrearing practices result in different expectations for the ages at which children should achieve developmental milestones.

There is not one universally "right" or "correct" age at which a child should achieve a developmental milestone. One family's expectations are not more valid than another family's expectations. The "norms" that are often referred to as developmental milestones are derived from decades of research that primarily includes white middle-income children who live with two heterosexual parents and who speak English as their home language. Historically, these norms have privileged children from these families while placing other groups at a disadvantage.

For example, lists of developmental guidelines traditionally state that two-year-olds should be able to feed themselves with a spoon. However, many families do not expect two-year-olds to feed themselves. Some educators have used this developmental milestone to suggest to families that their children or their childrearing practices should change. This way of using the developmental guidelines can shame and marginalize children and their families.

The professional knowledge base on child development is evolving to become more inclusive of children from historically marginalized families. Professionals now recognize promoting one cultural group's expectations as the "norm" may harm children; additional research and new forms of communication are required to describe child development more equitably.

The revised New York State Early Learning Guidelines include the phrase: "what the educator might observe." This language reminds users to take an inclusive view of development. Educators may not observe any or all of the items. Educators are invited to think critically about these norms and be aware of the ways in which they may privilege one group over another.

Educators are encouraged to begin by talking to families about the family's expectations for child development. Educators may approach these conversations with an awareness that families may view the educator as the "expert" on child development. Families may not feel that their own observations and expectations will be valued. To demonstrate that their input is important, educators may invite the family to speak first, maintain a stance of curiosity, and be genuinely willing to learn.

Educators are also invited to reflect on the origins of their own developmental expectations. Self-reflection helps educators to recognize how their own preferences, culture, and biases affect their judgment when observing and analyzing children's development. If the educator's own developmental expectations are not in accord with a family's expectations, defer to the family as the expert on their own child.



# Emergent Multilingual Learners and the Early Learning Guidelines

The revised New York State Early Learning Guidelines use the term “emergent multilingual learners” to refer to children ages birth through age eight who are learning multiple languages and who have the opportunity to become bilingual or multilingual adults. This term aims to recognize and promote multilingualism as a strength. Research shows that there are many benefits associated with speaking more than one language, such as increased ability to focus, enhanced problem-solving abilities, greater working memory, and enhanced ability to apply concepts to new situations.

The “educators might observe” sections of the Guidelines include many items in which the child speaks or responds to speech. These items are not specific to English. The child might make or respond to a similar statement in their home language(s) or language varieties. As this is true for all such items in the Guidelines, “in their home language” is not specified for each one.

Families often have different information about children’s language practices than that held by educators. It is important to engage families in ongoing two-way communication in order to form a complete picture of children’s development. Educators need this information from families in order to accurately understand emergent multilingual children’s developmental progress.

To establish a collaborative partnership with families and gain as much information as possible, educators are encouraged to ask families to complete a home language survey when they enroll in the program. A home language survey is a tool that allows educators to collect important information about children’s language practices. At the time the survey is completed, educators engage families and, if appropriate, children, in conversation about their language practices, their observations of the child’s development, and the best ways to create a smooth transition into the learning environment. A sample home language survey is included in the Appendix of this document.

Language learning progressions are dynamic, different for each child, and subject to fluctuation. Educators may use the NYS Early Learning Guidelines to reflect

on how a child’s emergent multilingualism is observable across the domains of development.

The child’s sense of self and sense of belonging in the learning environment influence their ability to engage and learn. All educators are encouraged to learn about and adopt multilingual approaches. Educators who are able to speak the child’s home language or language varieties should do so during both instructional and social activities. All educators can welcome the families and children to speak in their home languages in the learning environment. Educators communicate the value of multilingualism by encouraging families to speak, play, and read to children in their home languages.

The “ways the educator might support the child’s development” sections within the NYS Early Learning Guidelines include specific suggestions for supporting emergent multilingual learners. They include ways that educators can support the development of children’s home language(s) and language varieties, including instructional, environmental, and family-engagement supports.

# Children with Disabilities and the Early Learning Guidelines

The Revised New York State Early Learning Guidelines defines disability as any condition of the body or mind that makes it more difficult for the person to function in the environment around them. This definition is dynamic in that it depends both on the individual and the environment. Adaptations that make the environment more or less accessible alter the degree to which an individual is disabled.

Some children have disabilities that their families learned about before they were born or in early infancy. For other families, early childhood is the time when they gradually become aware of their children's disabilities. Offering all families developmental screening with valid, reliable, and culturally and linguistically relevant tools is an important part of the early childhood educator's role. ***(The revised New York State Early Learning Guidelines should not be used as an assessment, progress monitoring or developmental screening tool. This document is NOT designed or intended to be used as part of the process of developmental screening.)***

The broad range of individual differences among young children often makes it difficult to differentiate between normal variations in development and disabilities. It is important to remember that young children's acquisition of skills and abilities is widely variable. It is to be expected that children of the same age will develop skills at different rates and at different times. In fact, children often make significant gains in one area while other areas lag behind temporarily. Differences in childrearing practices among families result in different expectations for the ages at which children will achieve developmental milestones. The abilities of emergent multilingual learners may not be immediately observable in an English-language learning environment.

For these reasons, educators should be thoughtful when interpreting developmental screening results or considering if and why a child may be having difficulty functioning in the learning environment. Engaging the family from a stance of curiosity is a good place to start. Is there a mismatch between the family's expectations and the educator's? Does the family have suggestions for how the educator might adjust the learning

environment to make it easier for the child to function? Educators may experiment with different adaptations and observe the child's response.

If a developmental screening result suggests that the child needs further evaluation, or if the family has concerns about their child's development, educators may suggest that the family follow up on these concerns with their child's health care provider. Developmental monitoring is an important part of children's health care, and a health assessment—and possibly other evaluations—may be needed. Doctors are in the best position to talk with families about the next steps to take in evaluating children's health and development. Families may also refer to the New York State Parent Guide for more information about child development and referral resources: <https://www.nysparentguide.org>.

By law, all children with disabilities are required to be educated in the least restrictive environment. For most children, this means that they will attend childcare, preschool, and primary learning environments in their communities. One way to welcome children with disabilities into the learning environment is to learn from their families about ways to help them to be successful.



*Photo credit: Disability Rights Maryland*

# The Arts and the Early Learning Guidelines

What does art look like in early childhood?

- A toddler making shapes with their shadow against a wall.
- A two-year-old stirring a bucket full of mud and colorful leaves.
- A three-year-old rolling out clay snakes.
- A four-year-old building a house out of blocks and then imagining that small figures represent family members and what they say and do during meal time.
- A five-year-old pretending to be a superhero in the dramatic play center and at recess.
- A six-year-old working with friends to paint the backdrop for a performance of a story they dictated.
- A group of seven-year-olds singing in a choir.
- An eight-year-old performing a dance they have rehearsed while their friend plays the drums.

From an early age, children engage with the world as artists, composing arrangements of objects, lines, colors, words, sounds, movements, and gestures. Children use art all the time, to represent their ideas about beauty, science, math, history, and relationships. Art-making is an important component of social-emotional development, giving children ways to express and understand their feelings. Children’s engagement in art is intense and concentrated, and their creations are often startlingly poetic.

Within a play-based learning environment, children access all the arts, continuously, to represent their thinking in increasingly precise, varied, and complex ways. Each child develops unique forms of expression that reflect their own disposition, interests, and abilities. For these reasons, dance, music, theater, and visual and media arts do not each have their own domain within the Early Learning Guidelines but are incorporated throughout all of the sub-domains.

The Early Learning Guidelines include descriptions of the processes by which children engage in art. These include:

- Creativity and Inventiveness (Approaches to Learning)
- Representing (Cognitive Development)
- Composing (Language and Literacy)
- Creating and Interpreting Multimedia Texts (Language and Literacy)

The educator’s role is to provide children with a **variety of interesting materials and time to explore** them. Children’s artwork should be open-ended and entirely their own. Experiences in which children follow an educator’s model and there is a “right” way to complete the project are lessons in following instructions rather than examples of children’s artistic expression.

As children mature, the educator’s role also includes introducing them to the formal vocabulary of dance, music, theater, and visual and media arts. Children should have the opportunity to learn both the vocabularies of artistic expression from their own cultures and from other cultures. It is important that that all children have an opportunity to explore all the arts, so that they may find forms of expression that resonate with them.



Photo credit: Sherry Cleary



## Standards and the Early Learning Guidelines

The Early Learning Guidelines are not standards. Standards are student learning expectations: concepts children should understand and tasks children should be able to do as a result of skilled instruction. The New York State Education Department sets grade level standards for children from pre-kindergarten through grade 12. The Office of Head Start provides a set of standards for children from birth through age five called the Early Learning Outcomes Framework.

In contrast to standards that describe student learning expectations, the NYS Early Learning Guidelines describe how children develop — what educators

might observe children doing at each age level. They are a tool to guide educators in understanding and supporting young children's growth and development. For example, in social and emotional development, the Early Learning Guidelines state that three-year-old children may express strong feelings physically by kicking, hitting, or throwing items. It is not a learning expectation that three-year-old children express their feelings physically. Educators may use the Early Learning Guidelines to understand the development of emotional self-regulation in young children and to find ways to connect with and support children's growth in this area.

### The Early Learning Guidelines are:

- A resource that educators can refer to for information about how children develop
- A resource for ways educators can support children's development through:
  - self-reflection
  - family engagement
  - environmental design
  - activities
  - books

### The Early Learning Guidelines are not:

- A screening tool to determine a child's needs or eligibility for special education services
- An assessment system that can provide valid and reliable information about whether children are meeting widely held expectations for their development
- A set of standards that detail what children are expected to learn at each age level
- A curriculum, although you can use them to individualize experiences for children

# How to Read the Early Learning Guidelines

Over time, and with guidance and encouragement, children develop: **Curiosity and Interest**

Child approaches the world with curiosity and develops knowledge about specific topics.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Locates an informational text in the classroom to find out about topics they are interested in</li> <li>• Asks questions of experts (e.g., during a field trip to the waste treatment plant, child asks questions about how the pipes are connected)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Recognizes that reality is not directly knowable and that people may have different interpretations of the same event</li> <li>• Pursues a particular interest by reading multiple books about the topic and writing and drawing about it</li> <li>• Observes and records information over time (e.g., observes and records notes about the guinea pig in its cage each day)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Conducts research based on a topic of interest</li> <li>• Uses prior knowledge to develop research questions (e.g., learns about how fish spawn eggs and then decides to find out about the reproductive cycle of amphibians)</li> </ul>

Subdomain

Definition of subdomain

Use the age bands flexibly. There is broad range of individual differences among young children. Developmental expectations vary by culture.

Examples of what educators might notice children doing at each age level. These are not standards.

Check the glossary for definitions of words

Educator: Family child care provider, nursery school teacher, center-based child care lead and assistant teacher, district school teacher, paraprofessional, home-based educator, home visitor, or related service provider.

## Ways the educator might support the child's development:

- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"> <li>• Include time in the daily schedule during which children may follow their own ideas to make, build, and compose their own works</li> <li>• Allow students access to a variety of materials to pursue their interests:             <ul style="list-style-type: none"> <li>» Blocks and ramps</li> <li>» Writing and drawing materials</li> <li>» Books</li> <li>» Legos</li> <li>» Clay</li> <li>» Math manipulatives</li> </ul> </li> <li>• Visit the library with children and show them how to look for books related to their topics of interest</li> </ul> | <ul style="list-style-type: none"> <li>• Create lists of children's interests as part of learning about one another</li> <li>• Encourage children to ask their own questions about books (e.g., "Do you have any questions about the character?")</li> <li>• As the class begins a study, the educator gathers questions from the children, asking them:             <ul style="list-style-type: none"> <li>» "What do you want to find out about this?" and recording their ideas</li> </ul> </li> <li>• Invite children to create a presentation for the class on a topic or experience they know a lot about.</li> </ul> | <ul style="list-style-type: none"> <li>• Talk with families and children about the interests they are pursuing at home</li> <li>• Provide access to books and computer resources for children to use in researching their own interests and questions</li> <li>• Provide graphic organizers to support children in researching their own questions and curiosities and in using information to create their own works</li> </ul> |
|---|---|--|

Ideas for supporting children's development through:

- self-reflection
- family engagement
- environmental design
- activities
- books

Use ideas from any column that meet the individual child's needs

Domain

# How to Use the Early Learning Guidelines

Each day, all day, early childhood educators make decisions about how to support children’s development.

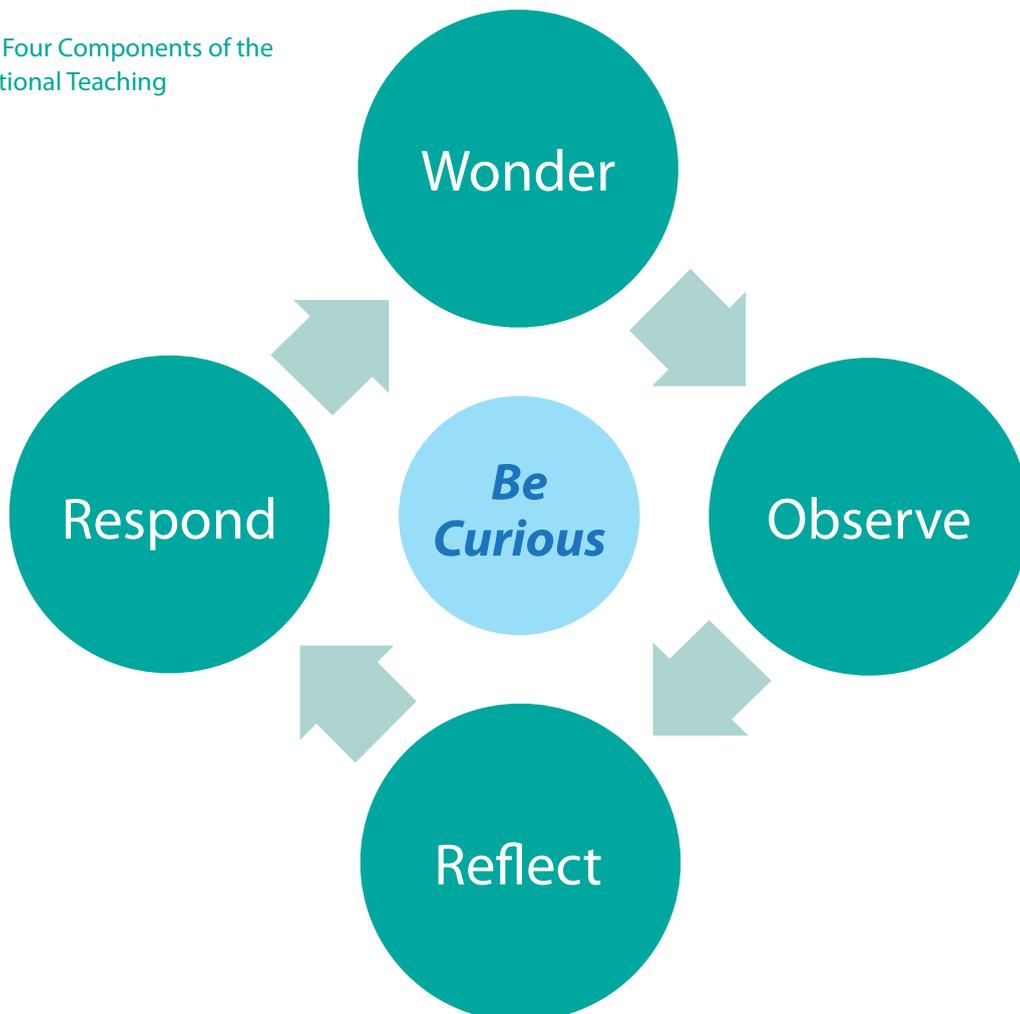
*When am I not making decisions? What to serve for snack, what book do we read, what song to sing, which child(ren) could use some one-on-one time with me, what interesting object should I put out on the welcome table, how many seats should I put at the painting table, what are important things to share with mom and dad today?*

Another educator adds: *Materials, placement of materials, resolving disputes between the kids, is the nap area comfortable, is the circle time long enough or short enough, are they interested in what we are learning, what book should I read? EVERY decision I make in the day affects the environment, my interactions with children, and their interactions with each other.*

The Revised New York State Early Learning Guidelines can help educators to understand child development so that they can make more intentional decisions.

**How can educators feel confident in their decisions and make sure their decisions are intentional?** The Cycle of Intentional Teaching and Learning is designed to be used in a play-based learning environment to guide educators’ decisions. When using the Cycle of Intentional Teaching and Learning, educators adopt a **stance of curiosity** about children. They think of themselves as teacher-researchers. When educators approach children with curiosity, they are less likely to be influenced by their own assumptions about what children should be doing.

**Figure 1:** The Four Components of the Cycle of Intentional Teaching



The Cycle of Intentional Teaching and Learning has four components (see Figure 1) and the Guidelines can help teachers as they engage in each component. The Cycle begins with **wondering**. Here educators generate questions; they think of things they would like to know about the child. The Early Learning Guidelines can assist educators in identifying areas they would like to know more about:

- I wonder how this child is *cooperating and negotiating* with their peers.
- I wonder who the important adults are in this child's life. (*Trusting Relationships with Adults*)
- I wonder why this child speaks so much at home and so little at school. (*Speaking*)
- I wonder what this child is most interested in right now. (*Interest and Curiosity*)

The next step is to **observe** children's learning. When educators observe, they step back, notice, and record what is happening to answer their question. They try to be objective by focusing on *who, what, where* and *when*, rather than *why* something is happening. There are many ways to do this:

- Photos
- Videos
- Work samples (drawings, paintings, block buildings)
- Written observations
- Voice recordings
- Transcriptions of children's language
- Family observations and stories

All of these records of children's development are referred to as *documentation*. A sample observation template is included in the Appendix.

Next educators **reflect** on their observations. They spend time looking at and thinking about the documentation. They also share the documentation with children's families and their teams to deepen their understanding of the child's development. During this step, educators use the Early Learning Guidelines "What the educator might observe" sections to compare their documentation to the sample observations. What have they found out about their original question? Where is this child on their unique developmental pathway? How does the child's culture emerge from what they see? This is the time when educators and families might talk about *why* the child is doing something.

The final step in the Cycle of Intentional Teaching and Learning is to **respond**. Educators can use the "Ways the educator might support the child's development" sections of the Early Learning Guidelines to make an intentional decision about what to do next. They might:

- Engage in self-reflection.
- Plan to learn more from families.
- Plan what to do the next time that happens
- Plan what to say the next time that happens
- Change the environment
- Change the schedule
- Choose a book to read
- Plan an activity
- Plan an outing or simple trip
- Gather materials for an art experience
- Share documentation, reflections, and ways to extend learning with families and the school community

## Introduction References

Child Welfare Information Gateway. (2014). Protective factors approaches in child welfare. Washington, DC: U.S. Department of Health and Human Services. Retrieved from [https://www.childwelfare.gov/pubs/issue\\_briefs/protective\\_factors.cfm](https://www.childwelfare.gov/pubs/issue_briefs/protective_factors.cfm)

Ministry of Education. (2017). *Te Whāriki: Early childhood curriculum*. New Zealand: Author.

Morell, Z., & Medellin, C. (2018). *Core principles for supporting emergent multilingual learners (EMLLs)*. New York City Division of Early Childhood Education

Rabadi-Raol, A., & Souto-Manning, M. (2018). (Re)centering quality in early childhood education: Toward intersectional justice for minoritized children. *Review of Research in Education, 42*, 203–225.

Reid, J. L., Kagan, S. L., & Scott-Little, C. (2017). New understandings of cultural diversity and the implications for early childhood policy, pedagogy, and practice. *Early child development and care, 189*(6), 976-989.

Shonkoff, J. P., et al. (2012, reaffirmed 2016). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics, 129*(1), 232–246.

Shonkoff, J., & Phillips, D. K. (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academies Press.

York, S. (2003). *Roots & wings: Affirming culture in early childhood programs*. St Paul, MN: Redleaf Press.

# I. Approaches to Learning

- A. Curiosity and Interest
- B. Initiative
- C. Persistence and Attentiveness
- D. Creativity and Inventiveness



Photo credit: Sherry Cleary

# Approaches to Learning

The Core Beliefs of the New York State CBK, which also serve as the guiding principles of this document, state that:

- Children construct their own knowledge based on their curiosity and driven by their interests. This active construction is facilitated by interaction with adults and other children.
- Children’s learning is active and follows a recurring path: awareness, exploration, inquiry, and application.

The “Approaches to Learning” section of the Early Learning Guidelines describes what active learning looks like in early childhood. In this section, you can see how children construct their own knowledge through exploration and inquiry at each age. This domain provides guidance for how to support children in developing the characteristics of an active learner: curiosity, creativity, initiative, and persistence.

Fostering these approaches to learning in early childhood prepares children to become independent learners who are able to engage in complex thinking and analytical reasoning. When educators create learning environments and engage in interactions that build these approaches to learning, children develop the cognitive processes they will need to be successful in most schools. These cognitive processes include the ability to set their own goals, focus on a task, look at it from multiple perspectives, describe their thinking, and persevere.

In using the “What the Educator Might Observe” sections of this domain, be sure to account for the individual and cultural variations of the learner. For example, curiosity looks very different in different people. For one child, curiosity might look like telling the educator that they need a screwdriver to take apart an old radio and then energetically pulling it to pieces. For another child, it

might look like reading a book about radios. And, for still another child, it might look like quietly observing an adult taking apart a radio. It is important that educators reflect on their own preferences, assumptions, and cultural expectations before deciding how to extend children’s approaches to learning.

The “Ways the Educator Might Support the Child’s Learning” sections include ideas that may be a cultural mismatch for some educators and families. For example, it suggests that in order to develop a child’s ability to take initiative, the educator should follow the child’s lead, notice what they are interested in, and then join their interests. Educators who were brought up to demonstrate ultimate respect to their elders may not feel that following a young child’s lead or giving them choices is valuable. Educators are encouraged to reflect with colleagues and families about the approaches to learning that prepare children to be successful in their cultures. What would these be called? What might educators observe at each age to see that the child was developing these approaches to learning?

I. APPROACHES TO LEARNING

# A. Curiosity and Interest

Child approaches the world with curiosity and develops knowledge about specific topics.



## Over time, and with guidance and encouragement, children develop: **Curiosity and Interest**

Child approaches the world with curiosity and develops knowledge about specific topics.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Will gaze at something that has caught their attention (e.g., a fan, pinwheel, or a mobile)</li> <li>• Changes behavior when interested in an object, person, or experience (e.g., by becoming quieter or louder, or by changing facial expressions)</li> <li>• Explores educator’s face, hands, or clothing while feeding, by staring and reaching out to touch their features</li> <li>• Explores the way objects, such as leaves or apple-sauce, feel</li> <li>• Finds objects and puts them in their mouth</li> <li>• Looks at themselves in the mirror and tries reaching their own reflection</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Feels, bangs, gets in, sits on, and throws objects to find out more about them</li> <li>• Crawls, cruises, climbs or walks toward objects of interest (e.g., attempts to reach objects that are high up)</li> <li>• Repeats experiences to develop their understanding. (e.g., learns to crawl up stairs, and subsequently crawls up every set of stairs they find)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Points to objects, vocalizes, and looks to educator to identify the object</li> <li>• Brings objects they are curious about to an educator</li> <li>• Takes things apart</li> <li>• When walking outside, stops to examine objects, such as a leaf</li> <li>• Will play with one object again and again (e.g., asks to hear the same book, and books on the same topic, again and again)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Asks simple questions involving what, where, and why; may not attend to the answer</li> <li>• Asks questions about where people are when they can’t be seen</li> <li>• Will approach things, or devise ways to reach items of curiosity, such as pulling over a chair to reach a table</li> </ul>

### Ways the educator might support the child’s development:

- Observe, record, and reflect on the child’s movement, responses, reactions, and gestures
- Invite the child to participate in exploring their senses by naming them. (e.g., “Yes, you feel the sun on your face. It is warm. Oh no. No more sun. I wonder where the sun goes. Oh Mr. Sun where did you go?”)
- Listen to the sounds of nature together:
  - » Rain falling
  - » Birds chirping
  - » Older children playing
  - » Leaves rustling the trees
  - » Dogs barking
  - » Wind chimes
- Provide freedom of movement and a safe space within the learning environment. When not engaged in caregiving activities the child may crawl, climb, touch, and tumble, with ample space to accomplish all of these movements
- Avoid battery-operated toys, electronic toys, or close-ended materials
- Provide the child with many opportunities to explore different foods. Describe the different characteristics (e.g., “The cracker is crunchy.” or “The orange is sweet and juicy.”)
- Provide sensory materials that are safe for babies, such as silicone muffin baking cups, large pot holders, or lightweight metal bowls
- Ask families what the child is interested in, and invite them to contribute objects related to the child’s interests to the learning environment
- Include different kinds of building materials in the learning environment:
  - » Blocks
  - » Cylinders
  - » Tunnels
  - » Ramps
  - » Recycled materials
- Build obstacle courses for the child to climb on and crawl through
- Provide opportunities for the child to observe live animals
- Include nature in the learning environment:
  - » Non-poisonous plants
  - » Butterfly farms
  - » Fish tanks
- Model curiosity. Ask open-ended questions and then provide the answers (e.g., “Oh look, here is an acorn. I found it on the ground near the tree. Where did it come from? How did it get in the grass? Look I think it fell from the tree. I think squirrels like acorns. Maybe we should leave it by the tree and maybe a squirrel will come by.”)

## Over time, and with guidance and encouragement, children develop: **Curiosity and Interest**

Child approaches the world with curiosity and develops knowledge about specific topics.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Often asks “why?”</li> <li>• Makes up stories about objects around them (e.g., observes fish tank and tells a story about the fish’s family)</li> <li>• Notices the interests of their peers (e.g., observes their play and then imitates it)</li> <li>• Investigates the details of caregiving (e.g., asks to help cook)</li> <li>• Compares experiences in one setting and another (e.g., after reading a book about pets, the child says, “I have a dog too.”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Learns details about a topic of interest, (e.g., after reading a book about sharks, reads more books about sharks and learns the names of many sharks)</li> <li>• Collects objects that they are interested in, for example, sticks</li> <li>• Tries to reproduce things they are interested in (e.g., looks at a book about a castle and then tries to build a castle in the block area)</li> <li>• Asks for explanations of how things work, (e.g., asks where the water in the faucet comes from)</li> <li>• Makes connection between their experiences at home and in school, (e.g., says, “I have paints at home too!”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Recognizes their peers’ knowledge and asks them about things that they are experts in</li> <li>• Asks scientific questions, (e.g., what happens to the caterpillar when it is in the chrysalis)</li> <li>• Believes that there is one objective truth about a subject and thinks that if others have a different interpretation, they do not know the truth</li> </ul>

### Ways the educator might support the child’s development:

- When a child asks a “why” question:
  - » Restate their question
  - » Acknowledge their curiosity. (“That’s an interesting question!”)
  - » Ask what they think the answer might be
  - » Talk together about how you might find the answer
  - » Go together to consult an expert, look for a relevant book, or visit a website
- Welcome the child to contribute to caregiving routines
- Join the child in making up stories
- Ask families what the child has expressed interest in at home
- Make those interests present in the learning environment
- Respect children’s efforts, and make special places to hold their collections
- Go to the library and check out several books related to a child’s interest
- Organize outings and field trips related to the children’s interests
- Support children’s ability to learn from one another:
  - » Allow time for sharing work
  - » Welcome questions and comments from other classmates about one another’s work
- Provide resources related to children’s interests. (e.g., if you hear children talking about dinosaurs, add dinosaur books, figures of dinosaurs to the learning centers)

## Over time, and with guidance and encouragement, children develop: **Curiosity and Interest**

Child approaches the world with curiosity and develops knowledge about specific topics.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Locates an informational text in the classroom to find out about topics they are interested in</li> <li>• Asks questions of experts (e.g., during a field trip to the waste treatment plant, child asks questions about how the pipes are connected)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Recognizes that reality is not directly knowable and that people may have different interpretations of the same event</li> <li>• Pursues a particular interest by reading multiple books about the topic and writing and drawing about it</li> <li>• Observes and records information over time (e.g., observes and records notes about the guinea pig in its cage each day)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Conducts research based on a topic of interest</li> <li>• Uses prior knowledge to develop research questions (e.g., learns about how fish spawn eggs and then decides to find out about the reproductive cycle of amphibians)</li> </ul>

### Ways the educator might support the child’s development:

- Include time in the daily schedule during which children may follow their own ideas to make, build, and compose their own works
- Allow students access to a variety of materials to pursue their interests:
  - » Blocks and ramps
  - » Writing and drawing materials
  - » Books
  - » Legos
  - » Clay
  - » Math manipulatives
- Visit the library with children and show them how to look for books related to their topics of interest
- Create lists of children’s interests as part of learning about one another
- Encourage children to ask their own questions about books (e.g., “Do you have any questions about the character?”)
- As the class begins a study, the educator gathers questions from the children, asking them:
  - » “What do you want to find out about this?” and recording their ideas
- Invite children to create a presentation for the class on a topic or experience they know a lot about.
- Talk with families and children about the interests they are pursuing at home
- Provide access to books and computer resources for children to use in researching their own interests and questions
- Provide graphic organizers to support children in researching their own questions and curiosities and in using information to create their own works



Photo credit: Justin Weiner

I. APPROACHES TO LEARNING

# B. Initiative

Child pursues their own goals.



## Over time, and with guidance and encouragement, children develop: **Initiative**

Child pursues their own goals.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Actively explores the environment with their senses</li> <li>Engages familiar adults in interactions (smiling, approaching, gesturing)</li> <li>Rolls or crawls closer to touch an object</li> <li>Reaches for something of interest, such as a caregiver’s glasses or a toy</li> <li>Tries to hold bottle and feed self</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Moves toward object or person they are interested in</li> <li>Wants to participate in self-care routines (e.g., wants to hold their own toothbrush)</li> <li>Crawls or toddles to an educator with a book they have selected</li> <li>Holds objects up or out to educator that they are curious about</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Vocalizes to express desire for an object or curiosity about it, with such phrases as “Dis?”</li> <li>Tries activities that their educator suggests they engage in (e.g., goes down the slide after their caregiver suggests it)</li> <li>Is inspired by the activities of their peers (e.g., after seeing another child push a doll stroller, tries to take the doll stroller and push it themselves)</li> <li>Looks or points at activities that they are interested in participating in</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Finds ways to accomplish their own goals, such as climbing onto a table to reach something up high</li> <li>Explores on their own and then returns to educator (i.e., runs to see something that looks interesting to them and then circles back to educator)</li> <li>Tells an educator what they want to do</li> </ul>

### Ways the educator might support the child’s development:

- Allow the child to freely explore the learning environment
- Remove items such as bouncers and electronic swings that restrict a baby’s movement
- Place interesting and appealing materials in the child’s line of sight, so they can choose what objects and materials to move toward and take initiative to explore
- Allow the baby to feel and mouth the books and objects
- Support the child by using vocabulary that indicates initiative (e.g., “Oh look, yes, you can open the box. What is inside? Scarves. Yes, you are shaking the scarves.”)
- Follow the child’s lead, taking time to stop and examine objects they are interested in with them
- Invite and welcome the child’s attempts to assist with routine tasks such as sweeping the floor and washing the tables, as well as picking up toys
- Build opportunities throughout the day for the child to make simple choices
- Slow down to the child’s pace, showing interest in what they are doing
- Engage the child in taking care of their stuffed animals or baby dolls in ways that mirror their self care: washing, diaper changing, trying to use the potty, reading books, and preparing for rest time with a blanket and lullaby
- Allow child to attempt tasks by themselves without doing it for them right away

## Over time, and with guidance and encouragement, children develop: **Initiative**

Child pursues their own goals.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Engages in solitary play with a preferred toy</li> <li>Asks educator to read them their favorite book</li> <li>Watches what another child is doing and then begins to do it alongside them</li> <li>Chases another child and then turns so that they may have a turn being chased</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Gathers the materials that they need for a simple project, such as making imaginary soup</li> <li>Finds their own clothing in their cubby and puts it on</li> <li>Makes a plan for what they want to create (e.g., plans to draw a house)</li> <li>Makes a choice about which area of the classroom they want to play in</li> <li>Makes a new friend by playing alongside or with them and engaging in conversations</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Takes care of classroom chores without being asked (e.g., throws out napkin after snack).</li> <li>Develops a play idea day after day (e.g., child returns to block area to continue a construction and play scenario that has been developed throughout the week)</li> <li>Advocates for their plot ideas when engaged in dramatic play with peers (e.g., when playing hospital in the dramatic play area, child asserts that the patient should be cured, while peer thinks they should die)</li> </ul>

### Ways the educator might support the child’s development:

- Include duplicates of toys in the learning environment so that multiple children can play next to each other simultaneously
- Help children to initiate play by giving verbal cues (e.g., “Your turn! Now it’s Chelsea’s turn, which means that you run and try to catch her!”)
- Involve the child in small group activities where they can contribute, participate, take turns, and anticipate as well as initiate turn-taking
- Discuss with families ways in which children’s initiative is a value in their family, community, and culture. Acknowledge different perspectives
- Recognize that a child may not demonstrate and express initiative in the same way in all settings (e.g., may take initiative with peers but not in the presence of elders)
- Use vocabulary related to initiative:
  - » “You decided to...”
  - » “You made a choice...”
  - » “You were planning to play...”
- Notice children’s attempts to initiate play ideas with peers, and advocate for those children whose ideas are not acknowledged
- Use children’s suggestions to set up a helper or job chart, with children volunteering for helper roles on a weekly basis

## Over time, and with guidance and encouragement, children develop: **Initiative**

Child pursues their own goals.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Thinks of ideas for stories they want to write about</li> <li>• Volunteers to help with classroom chores</li> <li>• Talks to an educator about how to solve a social problem (e.g., talks about homeless people they see on the way to school and asks how we might offer shelter to them)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Applies learning in new contexts (e.g., learns about gardening in school and then brings seeds home and plants them in back yard)</li> <li>• Attempts to master styles of drawing and creating (e.g., sees manga in a graphic novel and tries drawing in that style)</li> <li>• Selects materials to create engineering solutions (e.g., uses wire, tape, and pieces of wood to create a drawbridge)</li> <li>• Uses writing to meet their goals.(e.g., writes a card to a friend when they are out sick)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Recognizes that trying something new may be difficult at first</li> <li>• Independently determines direction for their future learning (e.g., decides that they would like to learn to play the guitar)</li> <li>• Considers alternatives before beginning a project</li> <li>• Knows what their own talents are and offers to use them to help others</li> <li>• Evaluates their progress on their goals</li> </ul>

### Ways the educator might support the child's development:

- Include a writing area in the learning environment that has multiple and varied tools, materials, and resources. (e.g., different types of paper and blank books with a few lines on each page for children to draw and write their own stories)
- Engage children in conversation about their own goals
- Discuss problems and plan solutions; ask for the child(ren)'s ideas for plans of action and document these in writing or drawing
- Engage children in conversation about their unique strengths and approaches to learning
- Allow children to bring functional materials from one area of work to another, for example tape and paper to the block area to hang signs
- Observe children's work with them, reflect on what they have done or created and their ideas, and plan next steps together
- Talk with families and children about skills the child is developing outside of school, such as the ability to play soccer
- Notice when children are taking initiative, and invest time and resources in helping them to achieve ambitious goals
- Provide models of individuals who noticed a problem and decided to act
- Engage children in service learning projects



Photo credit: Shannon Taggart

I. APPROACHES TO LEARNING

# C. Persistence and Attentiveness

Child focuses on tasks and perseveres in accomplishing them.



## Over time, and with guidance and encouragement, children develop: **Persistence and Attentiveness**

Child focuses on tasks and perseveres in accomplishing them.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Repeatedly shakes rattle to produce noise</li> <li>• Holds the attention of their caregiver (e.g., smiles, babbles, sustains eye-contact, cries)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Is deeply focused on mastering a new skill for days at a time (e.g., works to get onto all fours and then rocks when learning to crawl)</li> <li>• Focuses on the same thing as the caregiver (e.g., watches the caregiver’s hands and looks at their face as they turn the pages of a book)</li> <li>• Puts blocks in a bucket and then dumps them out and does it again</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Tries many ways of getting to an object that is out of reach</li> <li>• Wants to do favorite activities and practice developing skills over and over again (e.g., repeatedly jumps off low step)</li> <li>• Continues to try a difficult task when a caregiver sits close to them</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Sits on a caregiver’s lap while they read a board book from start to finish</li> <li>• Maintains their focus on a desired outcome                             <ul style="list-style-type: none"> <li>» Stacks large cardboard blocks until they balance</li> <li>» Completes 3–5 piece puzzle</li> <li>» Pushes and pulls a wagon up a hill</li> </ul> </li> </ul>

### Ways the educator might support the child’s development:

- Respond to the child’s need for rest and nourishment as a precursor to the child being attentive and persistent
- Create time in the day in which the educator sits on the floor with the child as they freely engage with materials of interests
- Enthusiastically mirror a child’s delight and joy
- Be present for the child; hold them for extended periods while singing, humming, and sharing spontaneous stories aloud
- Remove screens and electronic toys from the learning environment in order to foster deep and meaningful engagements
- Create learning environments and schedules that promote the development of focus and attention
  - » Regular uninterrupted time for free play
  - » Enough space for movement
  - » Limited number of materials
  - » Limited environmental distractions and intentional use of recorded music (e.g., during nap time, but not as background music during free play)
  - » Minimize visual distractions with walls that are simple, neutral in color, and free of commercial materials
- Ensure that the child’s caregiving needs are met so that they can focus on the task at hand
- Join the child in paying attention to an object or experience of interest
- Talk with the child about their activities using open-ended questions, such as “How did you do that? Tell me more.”
- Notice the child’s verbal and non-verbal expressions of determination, such as “Me do.” Provide time for the child to attempt the task independently and acknowledge their effort
- Provide materials and opportunities that meet their growing skill level. For example:
  - » Scissors that cut well and are designed for left- or right-handed dominance
  - » Small pitchers and stable cups so that children may pour independently
  - » Easy to manage clothing such as pull-on pants
  - » Sinks and toilets at child level or safely adapted for independence

*Note: In order to supervise children and be present with them, educators should refrain from accessing their personal phones in the learning environment. Photographs and videos of children should be taken with a dedicated device.*

## Over time, and with guidance and encouragement, children develop: **Persistence and Attentiveness**

Child focuses on tasks and perseveres in accomplishing them.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Focuses on the character and plot when engaged in pretend play (e.g., pretends to be the mother and stays in this role as the doll babies are fed and put to bed)</li> <li>• Listens to a short story from start to finish with a small group of children</li> <li>• Tries several times to put on their own shoes before asking for help</li> <li>• Chooses the same puzzle every day until they can do it with ease</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Makes a bead necklace of their name and sorts through all the letters until they find those needed</li> <li>• Puts blocks away in their designated places until every block has been put away</li> <li>• Listens to a storybook read to the whole group from start to finish</li> <li>• Asks for help from a caregiver to complete a task</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Attends to open-ended tasks that they are interested in for a minimum of 20-30 minutes</li> <li>• Pauses work to get up to talk to their peers</li> <li>• Rebuilds their elaborate block structure after it has been knocked down</li> <li>• Tries several different ways of solving a problem (e.g., tries making a bridge with blocks to drive a car over, and when it falls, tries a new foundation so that it will support the cars)</li> </ul>

### Ways the educator might support the child’s development:

- Follow the child’s lead in play; this may mean that the child assigns a role to the educator, often with the educator being a child, and the child assuming an adult role
- Though materials in the learning environment should be rotated, allow for previously used materials to reappear at the child’s request, and keep materials that the children are actively engaged with available to them
- Allow for ample time for the child to practice tasks such as dressing themselves and to develop self-help skills.
- Offer the child genuine opportunities to care for the learning environment, indicating how important and meaningful it is to be mindful of such tasks as watering plants, putting materials away, or stacking objects
- Notice children’s accomplishments, patience, and persistence and describe why their efforts are important
- Provide opportunities for children to revisit experiences and materials again and again so they are able to deepen their understanding.
- Encourage the child in their work, rather than solving the problem for them. Ask:
  - » “How can you figure that out?”
  - » “How can you fix that?”
- Choose a book to read aloud to the class over several days; each day ask children to recall details from the previous readings and predict what will happen next
- Offer children a variety of materials for open-ended work, encouraging them to stay with work they do not finish in one working period
- Take time to reflect on the process together, asking:
  - » “How did you do that?”
  - » “Where did your idea come from?”



Photo credit:  
Justin Weiner

## Over time, and with guidance and encouragement, children develop: **Persistence and Attentiveness**

Child focuses on tasks and perseveres in accomplishing them.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Sustains interest in a chapter book the educator is reading the class over the course of several weeks</li> <li>• Reflects on their work and makes changes based on feedback from peers or educators</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Is able to concentrate for extended periods of time (30 minutes or more), even on non-preferred tasks</li> <li>• Makes several attempts to solve a problem, but doesn't give up until they find a solution</li> <li>• Tries multiple strategies for solving a problem</li> <li>• Remembers essential facts over a period of days</li> <li>• Is conscious of the presentation of their work and makes revisions to improve their work</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Screens out distractions and concentrates on relevant information as they work</li> <li>• Makes a decision about how to work so they will be able to focus</li> <li>• Decides to step away from a challenge when frustrated and then returns to it</li> <li>• Organizes long-term projects (e.g., begins a project by gathering supporting texts)</li> <li>• Revises their writing, checking for meaning, spelling, and punctuation</li> </ul>

### Ways the educator might support the child's development:

- Provide large, uninterrupted time blocks for work on projects
- Ask children to share work in progress, reflect on their process, and plan aloud their next steps; other children can offer suggestions for next steps
- Create areas in the classroom for "works in progress"
- Encourage children to choose and read books that they need several days to finish; when you check in with them ask them to summarize and predict
- Support children in planning and carrying out projects over time; offer structures for them to keep track of steps in their work (i.e., check lists, story maps, and planning pages)
- Create formats for reflective talking and writing about the child's work processes, including such prompts as
  - » "What was hard in making your project?"
  - » "Where did you get stuck?"
  - » "How were you able to figure out the problem?"
- Notice and provide encouragement when children feel frustrated or impatient. (e.g., "I see that this is taking longer than you expected, and sometimes when we have to take many steps to solve a problem, we get tired!")
- Acknowledge persistence. (e.g., "Wow, you are wrestling with that long text! I bet you are learning so much. I can't wait to hear your thoughts about it.")
- View mistakes as learning opportunities. (e.g., "I love seeing your work on this problem; every time I see you find a mistake and use a new strategy, I know your brain is growing!")
- Reach out to families to help with establishing a routine for homework time and modeling positive support

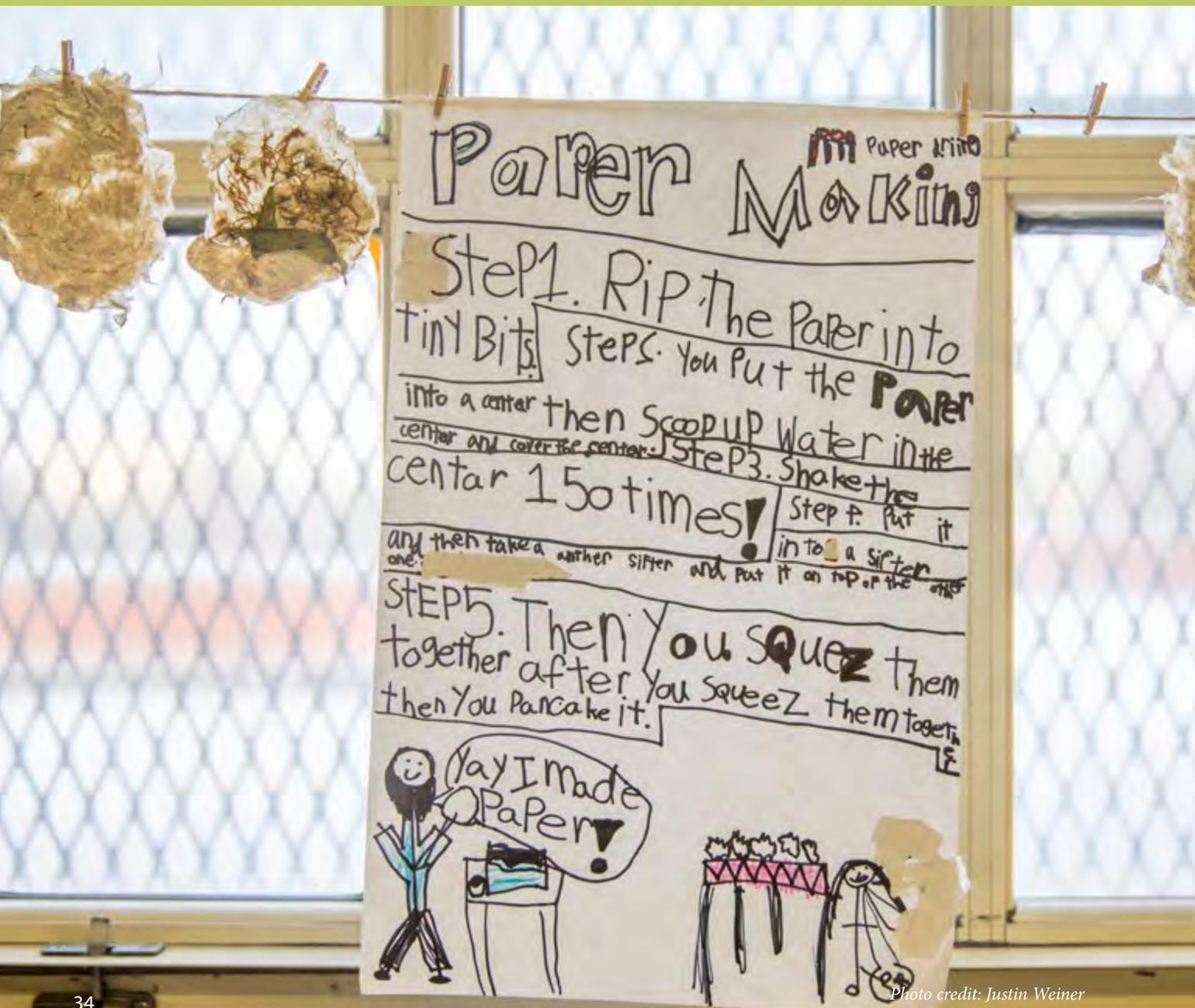


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Sarah Ferholt

I. APPROACHES TO LEARNING

# D. Creativity and Inventiveness

Child uses their imagination to create and invent.



## Over time, and with guidance and encouragement, children develop: **Creativity and Inventiveness**

Child uses their imagination to create and invent.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Imitates expressions on caregiver’s face</li> <li>• Shakes, mouths, and drops objects</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Imitates unusual uses for objects (e.g. places pot on head as a hat)</li> <li>• Tries out ways to use objects that they have observed in other places (e.g., bangs on a surface after watching drumming at a cultural event)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Invents new uses for everyday materials ( e.g., bangs on pots and pans)</li> <li>• Tries different combinations of objects (e.g., tries to fit small blocks into a peg sorter)</li> <li>• Imitates adult’s idea (e.g., following educator’s example to make themselves a necklace by stringing large beads or tubes together)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses everyday objects in imaginary play (e.g., picks up sticks and pretends they are swords)</li> <li>• Experiments with using various materials to solve problems (e.g., places a block on a stack of papers that is blowing away)</li> <li>• Dresses up as characters, (e.g., wraps scarf around neck and pretends to be a superhero)</li> </ul>

### Ways the educator might support the child’s development:

- Meet the needs of the children so they experience trust, happiness, and joy
- Have fun with the child—laugh, sing, giggle, and dance
- Include pictures of babies and children showing different emotions from different cultures in the learning environment
- Provide a variety of teethers that are different sizes, and textures and that make different gentle sounds
- Observe and acknowledge children’s creative use of objects
- Create environments where children can experience freedom of movement, exploring their bodies in space and experiencing what they can do physically
- Remove screens and electronic toys from the learning environment
- Sing songs from your own culture and learn songs from the children’s families and cultures
- Include open-ended materials in the learning environment
  - » Various wooden blocks
  - » Cardboard blocks
  - » Textural fabrics
  - » Various kinds of paper
  - » Clay
  - » Egg cartons
  - » Play dough
  - » Interlocking toys
  - » Crayons
  - » Paints
- Be creative and inventive with language; engage in wordplay by making up silly words that rhyme with one another
- Provide different kinds of music and encourage the child to move to the different beats and tempo
- Include open-ended props for dramatic play, such as boxes, bags, and large pieces of cloth
- Provide everyday items for children to play and create with, such as paper towel rolls, tissue paper, yarn, string, and tape

## Over time, and with guidance and encouragement, children develop: Creativity and Inventiveness

Child uses their imagination to create and invent.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Asks adult for assistance with their creations (e.g., child asks educator to make a tent by putting a sheet over a table)</li> <li>• Embodies a pretend play character day after day</li> <li>• Experiments with materials (e.g., dips paint into water and sees what color the water turns)</li> <li>• Invents words in play (e.g., says the specks of dirt in the sunlight are “bittle”)</li> <li>• Sings made up songs to themselves</li> <li>• May have an imaginary friend</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Engages in detailed pretend play with peers</li> <li>• Makes objects that they need for pretend play (e.g., makes a boat out of a cardboard box)</li> <li>• Tries several ways to create the object they have in mind. (e.g., child experiments with different foundations until they have found the one that will hold up a block bridge)</li> <li>• Develops techniques for painting and drawing (e.g., makes fast and slow strokes, or thick and thin lines)</li> <li>• Hears peers speaking a different language and makes up nonsense words and says they are speaking that language</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Adds detail to creations (e.g., makes a clay bird with wings and a beak)</li> <li>• Asks more experienced people for advice about their creations (e.g., discusses ways to build stairs with an educator and then uses their advice)</li> <li>• Uses writing to add detail to their projects (e.g., includes a stop sign in their block construction)</li> <li>• Makes detailed and elaborate costumes for pretend play</li> </ul>

### Ways the educator might support the child’s development:

- Provide access in the learning environment to open-ended materials children can use in a variety of ways
  - » Blank paper of different sizes, textures, and colors
  - » Watercolor and tempera paints
  - » Pencils, colored pencils, crayons, and markers
  - » Collage materials such as origami paper, pom-poms, and buttons
  - » Sculpture materials, such as pipe cleaners and cardboard
  - » Pieces of cloth in a pretend area
  - » Boxes
  - » Scissors
  - » Masking tape and glue
- Guide the child’s use of materials, noticing and commenting on their actions
- Allow children to save artwork and return to it. Have a place to keep projects if the child needs to transition to another activity and wants to continue to work on the project at another time
- Display children’s art, at child’s level, around the room and in the hallway. Document and share the process in which the art is being created with children, through written descriptions and photographs
- Provide child with access to artists and artwork from own and other cultures (e.g., pictures of famous artworks, sculptures, and artifacts)
- Include time in the day for children to experiment with musical instruments, song, and dance
- Include books in the learning environment about inventive and creative characters
  - » *Frederick* by Leo Lionni
  - » *Harold and the Purple Crayon* by Crockett Johnson
  - » *Iggy Peck Architect* by Andrea Beatty
  - » *Rosie Revere Engineer* by Andrea Beatty
  - » *The Dot* by Peter Reynolds
  - » *Beautiful Oops* by Barnie Saltzberg
- Teach vocabulary related to art-making (“One color of paper could overlap, or go on top of another color, in your collage”)
- Provide opportunities for learning in which there is no right or wrong way to accomplish the goal, and encourage children to try different strategies or solutions

## Over time, and with guidance and encouragement, children develop: **Creativity and Inventiveness**

Child uses their imagination to create and invent.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses their knowledge of science or social studies in creating (e.g., finds a beetle and makes a home for it with leaves and sticks)</li> <li>• Collaborates with peers to create a project over time (e.g., works together in a small group to paint the backdrop for a play)</li> <li>• Uses a familiar story as the basis to tell a new version (e.g., learns several Anansi stories and then makes up their own story about a tricky spider)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses standardized tools to assist them in their projects (e.g., uses a yardstick to measure the amount of string they need to hang up a curtain)</li> <li>• Thinks flexibly about how to create a project</li> <li>• Creates variation of existing games with peers</li> <li>• Adds functional details to a project (e.g., sews on a button and makes a rough buttonhole to hold on a cape)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Presents an idea for a creative project to the group and then waits for the group’s feedback and incorporates their ideas</li> <li>• Considers how objects appear from points of view not their own (e.g., tries drawing a picture from a bird’s-eye perspective)</li> <li>• Incorporates ideas from cultures they have learned about into their creations</li> </ul>

### Ways the educator might support the child’s development:

- Include “choice time” in the daily schedule during which the child has access to a variety of materials and may follow their own idea for a project
- Provide familiar tools such as scissors, rulers, tape, and glue for work
- Document and facilitate children in recording their work with photographs, drawings, and writing; reflect on the process of creating
- Introduce the formal vocabularies of music, dance, and visual arts
- Provide specific challenges to see how children encounter them, (e.g., ask children if they can figure out how to use a piece of paper to support a book)
- Ask the child(ren) to use drawing and writing to plan a longterm project, alone and in groups, and include a materials list and book/computer resource list for project
- Support child(ren) in collecting materials to create their project (e.g., collect bottle caps for children to use for wheels when building vehicles)
- Create opportunities for children to work collaboratively on creative projects over the course of several weeks
- Facilitate group reflection on projects, exploring what children noticed, what observations they made, and what they learned about working together
- Provide more specialized tools and materials for use in making projects
  - » Scales to compare weights
  - » Graphite pencils
  - » Chalk pastels
  - » Editing software
- Visit museums and libraries to learn about varieties of art -making and engineering



Photo credit: Sherry Cleary

## Approaches to Learning References

California Department of Education. (2008). *California preschool learning foundations*. Sacramento, CA: Author. Retrieved from <http://www.cde.ca.gov/sp/cd/re/documents/preschoollf.pdf>.

California Department of Education. (2009). *California infant/toddler learning & development foundations*. Sacramento, CA: Author. Retrieved from <http://www.cde.ca.gov/sp/cd/re/documents/itfoundations2009.pdf>.

Colorado early learning and development guidelines. (n.d.). Retrieved from [https://earlylearningco.org/pdf/ELDG\\_Guidelines\\_English.pdf](https://earlylearningco.org/pdf/ELDG_Guidelines_English.pdf).

Dombro, A. L., Jewkes, A.M., Marsden, D.B., Meisels, S.J., & Weston, D.B., (2003). *The ounce scale: standards for the developmental profiles (birth–42 months)*. New York, NY: Pearson Early Learning.

Dichtelmiller, M.L. (2013). *The work sampling system omnibus guidelines (preschool through third grade)*. New York, NY: Pearson.

Hammond, Z. (2014). *Culturally responsive teaching & the brain*. Thousand Oaks, CA: Corwin Press.

High Scope Educational Research Foundation. (n.d.). *Preschool child observation record*. Ypsilanti, MI: Author.

Irving Harris Foundation Professional Development Network. (2012, updated 2018). *Diversity-informed tenets for work with infants, children, and families*. Chicago, IL: Irving Harris Foundation. Retrieved from <https://imhdivtenets.org/tenets/>.

Office of Head Start. (2015). *Head Start early learning outcome framework*. Washington, DC: U.S. Department of Health and Human Services.

Office of Head Start. (2018). *Revisiting and updating the multicultural principles for Head Start programs serving children ages birth to five*. Retrieved from <https://eclkc.ohs.acf.hhs.gov/culture-language/article/multicultural-principles-early-childhood-leaders>.

Washington State Department of Early Learning. (2012). *Washington State early learning and development guidelines: Birth through 3rd grade*. Olympia, WA: Author. Retrieved from [www.del.wa.gov/development/benchmarks/Default.aspx](http://www.del.wa.gov/development/benchmarks/Default.aspx).

Wood, C. (2018). *Yardsticks: Child and adolescent development 4–14*. (4th Ed.). Turners Falls, MA: Center

## II. Physical Well-Being, Health and Motor Development

- A. Large Motor Skills
- B. Small Motor Skills
- C. Sensory Integration
- D. Self-Care
- E. Healthy Sexuality



*Photo credit: Justin Weiner*

# Physical Well-Being, Health and Motor Development

Children's bodies and minds grow together. From birth, children use their whole bodies to engage with the world. A baby seems to smile with their toes, reaching out with every part of their being to express delight. A toddler picks up a ball in each hand and then looks intensely at a third ball, reasoning about what will happen if they stop to pick it up. A preschooler rides a tricycle with a friend around the playground, sees a hose, and says, "I think we need more gas." A child in the primary grades rehearses a dance performance with a friend. At every stage, the child's physical development connects to their social emotional and cognitive development.

## Motor Development

Early childhood educators may use the Early Learning Guidelines to design the learning environment to support children's growing motor skills. For example, the Guidelines suggest providing space and time for infants to freely move and explore, rather than confining them to swings, walkers, and seats. Higher levels of physical activity in early childhood have also been associated with lower incidence of obesity chronic disease in adulthood.

The Guidelines contain lists of materials that support the development of children's ability to use the small muscles in their hands and wrists at each age. Young children benefit from such activities as cooking, sculpting, tinkering, weaving, and sewing, which strengthen their hands. Small muscle strength is essential for efficient and legible handwriting.

Young children are just discovering the world with all of its sensations. Early childhood educators can create learning environments that nourish, delight, and intrigue the child's senses. Nature provides a perfect balance of beautiful, soothing, and stimulating experiences. Educators often notice that when they provide children with satisfying sensory experiences, children are happier, calmer, more engaged, and apt to sleep better.

## Physical Well-Being

With the guidance of caring educators, young children gradually develop responsibility for their physical well-being. It is important for educators to have conversations with families to create alignment with families' expectations around physical care. Some toddlers are eager to do routine self-care activities, such as hand washing and tooth brushing, by themselves. Providing children with materials and tasks they can manage independently develops their positive sense of self. As children move from the preschool to the primary grades, they can increasingly use signs with print and pictures to follow the steps of self-care routines.

Young children may also be eager to take responsibility for their physical safety and well-being. When given the opportunity, children often make good decisions about managing risk. The Early Learning Guidelines provide guidance about creating safe learning environments and closely monitoring children's risk-taking.

The foundation for healthy sexuality starts at birth. The revised Early Learning Guidelines include information about children's sexual development at each age and suggestions for how educators can work with families to ensure that each child has a healthy relationship to their body, pleasure, and gender.

## II. PHYSICAL WELL-BEING, HEALTH AND MOTOR DEVELOPMENT

# A. Large Motor Skills

Child uses and coordinates their large muscle groups.



## Over time, and with guidance and encouragement, children develop: Large Motor Skills

Child uses and coordinates their large muscle groups.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Holds head upright and in middle of body when carried</li> <li>• Brings hands together while lying on their back</li> <li>• Lies on their back and holds onto their feet</li> <li>• Rolls from back to front</li> <li>• Rolls from front to back</li> <li>• Sits unsupported and reaches for objects</li> <li>• Moves from sitting to hands and knees</li> <li>• Rocks back and forth on their hands and knees</li> <li>• Pulls body forward while on stomach (commando crawl)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Moves between lying down, sitting, and balancing on hands and knees</li> <li>• Crawls</li> <li>• Pulls to a standing position</li> <li>• Sits back down and moves to crawling after sitting down</li> <li>• Pulls to standing, and uses one hand to manipulate toys</li> <li>• Cruises (walks holding on to furniture)</li> <li>• Adjusts body position when moving up or down slopes or along different surfaces</li> <li>• Crawls up the stairs</li> <li>• Starts to walk around tables with support</li> <li>• Pushes a doll stroller or other wheeled object while walking</li> <li>• Walks without support</li> <li>• May walk a bit and then suddenly sit down</li> <li>• Stops walking, squats, and stands back up</li> <li>• Throws a ball</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Runs</li> <li>• Kicks a ball</li> <li>• Climbs onto an adult-sized couch</li> <li>• Walks up and down stairs while holding onto an educator’s hand</li> <li>• Walks up and down stairs or climbing equipment by stepping with both feet on each step</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Changes speed or direction while moving though may have difficulty stopping with control</li> <li>• Walks up stairs, placing one foot on each step</li> <li>• Bends over to pick up a toy and stands back up</li> <li>• Jumps forward with both feet at the same time</li> <li>• Walks on tip-toes when asked</li> <li>• Climbs a playground ladder</li> <li>• Catches a medium-sized ball</li> <li>• Pedals a tricycle</li> </ul>

### Ways the educator might support the child’s development:

- Dance with the baby in your arms so they can feel your movements and begin to move with you
- Place infant in front of a mirror so that they can see the different ways that they move
- Create spaces, places, and times for whole body play and movement
- Place babies on their abdomen with toys placed within sight but slightly beyond their reach; recognize the baby’s efforts to move toward the toys by saying such phrases as, “You really worked very hard to reach that toy and now you have it!”
- Respect babies’ sense of dignity and autonomy by allowing them to move freely in the ways that they would like; avoid furniture that limits babies’ movements such as bouncers and walkers
- Create an indoor learning environment that provides opportunities for children to develop their large motor skills
  - » Open spaces where new walkers can practice walking back and forth
  - » Different levels so that children are able to pull themselves up on something
  - » Mats or rugs for rolling and stretching
  - » Large baskets and boxes for crawling in and out of
- Create schedules in which children are able to move their bodies freely whenever they are not engaged in caregiving routines
- Create outdoor spaces that are safe for young toddlers to freely explore
- Include large motor furniture in the indoor learning environment
  - » Small slide
  - » Steps with platform
  - » Rocker boat/ bridge
  - » Tunnel
  - » Large blocks made of wood or cardboard
- Play ball with children, introducing concepts of taking turns, catching, and throwing
- Introduce action songs such as, “Animal Action,” “Sammy,” and “We’re Going on a Bear Hunt”
- Give children opportunities to walk barefoot on different surfaces, such as carpets, wood floors, linoleum floors, sand, concrete, or soft matting

## Over time, and with guidance and encouragement, children develop: **Large Motor Skills**

Child uses and coordinates their large muscle groups.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Walks along curb or beam for short periods</li> <li>• Jumps off a step with both feet together</li> <li>• Throws ball overhand</li> <li>• Catches medium- to large-size balls and similar objects by trapping them against body with straight arms</li> <li>• Climbs up playground ladders</li> <li>• Gallops</li> <li>• Has a smooth walk/run gait</li> <li>• Can stop body before running into other peers or obstacles</li> <li>• Runs and stops suddenly without falling</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Runs smoothly around obstacles, stops and starts, plays tag</li> <li>• Jumps for height and distance</li> <li>• Hops on one foot</li> <li>• Balances on one foot for a few moments</li> <li>• Pedals tricycle while navigating corners and obstacles</li> <li>• Walks up and down stairs, alternating feet, without support</li> <li>• Climbs down playground ladders</li> <li>• Squats without falling over</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Skips using alternating feet</li> <li>• Walks backwards</li> <li>• Turns somersaults</li> <li>• Catches a playground ball from 3 feet away</li> <li>• Balances on either foot</li> <li>• Walks up and down stairs while holding an object</li> <li>• Moves confidently around an obstacle course, maintaining balance while stopping and turning</li> </ul>

### Ways the educator might support the child’s development:

- Provide access to playground materials that support the development of gross motor skills
  - » Balls of various sizes
  - » Ribbon dancers
  - » Tricycles
  - » Scooters
  - » Low steps
  - » Large blocks
  - » Balance beams
- If possible, take children on walks in nature during which they have the opportunity to walk on different surfaces and climb over rocks and logs
- Play games with children that facilitate the development of gross motor skills, such as
  - » Simon Says
  - » Freeze tag
  - » Hokey Pokey
  - » Head, Shoulders, Knees, and Toes
  - » Red Light, Green Light
  - » Songs with dance steps that include galloping, skipping, and walking in rhythm
- Provide times in the daily schedule for both structured and unstructured gross motor activity
- Provide access to playground materials that support the development of gross motor skills.
  - » Hula Hoops
  - » Basketballs
  - » Soccer balls
  - » Large wooden blocks
  - » Jump ropes

Over time, and with guidance and encouragement, children develop:  
**Large Motor Skills**

Child uses and coordinates their large muscle groups.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Kicks a ball at a target</li> <li>• Pumps legs to swing</li> <li>• Rides a bicycle without training wheels</li> <li>• Jumps rope</li> <li>• Dribbles basketball a few times</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Runs up and down stairs with alternating feet</li> <li>• Runs to catch moving ball</li> <li>• Turns cartwheels</li> <li>• Swims</li> <li>• Learns a series of dance steps</li> <li>• Swings bat and hits ball</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Shows good form in basic movement even when participating in fast-moving games</li> <li>• Dribbles ball forward</li> <li>• Runs forward while tossing a ball back and forth with a peer</li> <li>• Mirrors partner’s movements in a dance</li> <li>• Tosses a ball to themselves and hits it with a bat</li> </ul>

**Ways the educator might support the child’s development:**

- Sing songs or chants with some dance steps to practice galloping, skipping, side stepping, walking in rhythm, such as
  - » “Skip to My Lou”
  - » “Going to Boston”
  - » “El Juego Chirimbolo”
  - » “Sasha 1-2-3”
  - » “Little Johnnie Brown”
  - » “Funga Alaffia”
- Provide structured gross motor breaks throughout the day.
- Provide unstructured, outdoor recess time each day.
- View recess as a right, not a privilege
- Teach playground ball games such as kickball, foursquare, and tetherball
- Create opportunities for children to choreograph sequences of movements
- Organize competitive games with children and model sportsmanship
- Talk to families about the importance of gross motor play during out-of-school time
- Connect families to local opportunities to participate in sports (e.g., soccer leagues, local playgrounds, public swimming pools)
- Create opportunities for children to learn and practice dances from their families’ communities and cultures

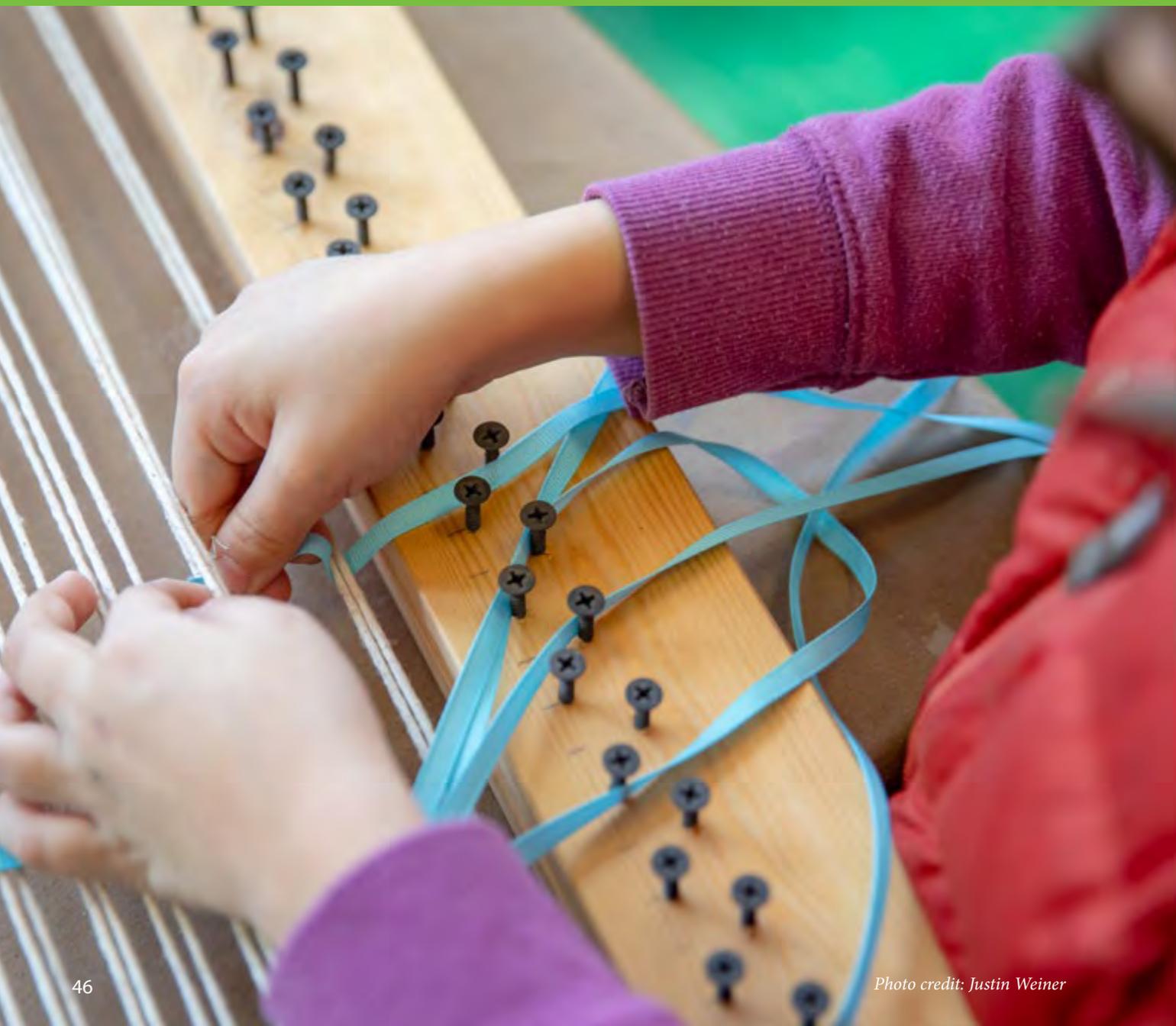


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## II. PHYSICAL WELL-BEING, HEALTH AND MOTOR DEVELOPMENT

# B. Small Motor Skills

Child controls the small muscles in their hands and wrists.



## Over time, and with guidance and encouragement, children develop: Small Motor Skills

Child controls the small muscles in their hands and wrists.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Discovers fingers and toes</li> <li>• Holds feet in hands or put hands in mouth</li> <li>• Opens and closes hands</li> <li>• Grips caregiver’s finger or similar object</li> <li>• Coordinates hands and eyes when reaching for and holding a toy, such as a rattle</li> <li>• Reaches out and pushes ball</li> <li>• Picks up an object, such as a rattle , turns it over, and drops it</li> <li>• Grasps objects in each hand and bangs them together</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses forefinger and thumb to pick up smaller objects like cereal or pasta</li> <li>• Picks up small blocks and drops them into a container</li> <li>• Practices placing objects on top of one another, such as blocks or stacking cups</li> <li>• Grasps the string of a pull-toy</li> <li>• Makes holes with one finger in play dough</li> <li>• Points, with index finger extended and other fingers in a fist</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Holds a truck in one hand and uses the other hand to explore the wheels</li> <li>• Pulls toys by tugging on a string</li> <li>• Holds on to two blocks while trying to reach for another block</li> <li>• Uses large brush to stand and paint at the easel</li> <li>• Holds board book upright and turns the pages</li> <li>• Holds a crayon between fingers and thumb and scribbles with big arm movements</li> <li>• Uses wrist to rotate knob puzzle pieces to fit them in puzzle board</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Use child-safe scissors in one hand to make snips in a piece of paper</li> <li>• Strings large wooden beads onto a shoelace</li> <li>• Balances 5–6 blocks on top of one another</li> <li>• Open a door by turning the round handle</li> <li>• Picks up a cup with one hand to drink from it</li> <li>• Turns the pages of a paper book one at a time</li> </ul>

### Ways the educator might support the child’s development:

- Speak gently to the baby grasping your finger in a fist
- Gently touch the baby’s hands so that they can become aware of them
- When child is able to sit upright in a chair or high chair offer them soft finger foods that they can feel and pick up, such as cereal rings and very soft vegetables
- Include materials in the learning environment that foster fine motor skills
  - » Nesting toys
  - » Linking rings
  - » Busy boxes
  - » Cloth books
  - » Squishy balls
- Observe and reflect to the child what their hands are doing
- Provide objects of different textures for the child to hold or bang; describe what the child is doing (“You are holding that spoon so tightly. You opened your fingers and let it go.”)
- Support the child’s sense of dignity and autonomy by allowing them to choose what to do with their hands; avoid manipulating the child’s hands for them
- Acknowledge the child’s efforts at mastery of their fine motor skills and share authentic praise of their accomplishments
- Sings songs in which the child can observe your hand movements, such as “The Itsy Bitsy Spider” and “Little Fish, Little Fish, Swimming through the Water”
- Include materials in the learning environment that foster fine motor skills
  - » Balls
  - » Blocks
  - » Cardboard tubes to string with yarn
  - » Knob puzzles
  - » Large pegboards
  - » Modeling compound
  - » Spoons and scoops in sand and water areas
  - » Cloth to collage
  - » Safety scissors
  - » Paper to crumple/rip
  - » Variety of painting supplies

## Over time, and with guidance and encouragement, children develop: Small Motor Skills

Child controls the small muscles in their hands and wrists.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses crayon, marker, or pencil to draw lines and rough circles and shapes that may resemble letters and people</li> <li>• Turns the pages of a book one at a time</li> <li>• Builds a tower of 8 or more small blocks</li> <li>• Cuts across small piece of paper with scissors</li> <li>• Pinches, pounds, rolls, and squeezes clay</li> <li>• Can place and remove a cookie cutter from a mound of clay</li> <li>• Places small pegs in in pegboard</li> <li>• Pours water from a small pitcher into a cup with minimal spillage.</li> <li>• Can use forks, spoons, or chopsticks</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Strings small beads onto laces</li> <li>• Builds a tower of 10 or more blocks</li> <li>• Hits nails and pegs with a hammer</li> <li>• Forms shapes and designs out of clay (such as cookies with chips or snakes with eyes)</li> <li>• Buttons medium-large buttons when dressing themselves</li> <li>• Cuts along a line</li> <li>• Pulls tape off a dispenser, then attempts to tape items to a page or form tape into a ball</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Consistently uses their right or left hand</li> <li>• Tears a small piece of tape off a tape dispenser</li> <li>• Uses scissors with one hand to cut out shapes</li> <li>• Uses pencil to copy many shapes and letters; these may be overly large or rough looking but the letter will be apparent</li> <li>• Spins a top</li> <li>• Zips up own coat</li> </ul>

### Ways the educator might support the child’s development:

- Include materials in the learning environment that foster fine motor skills
  - » Safety Scissors
  - » Magazines to tear and cut
  - » Clay and play dough
  - » Small blocks
  - » Duplos
  - » Fingerpaint
  - » Easel painting
  - » Pegboards
  - » Puzzles
  - » Small cups and containers in the sand and water areas
  - » Chunky crayons
  - » Stickers
  - » Large wooden beads for stringing
- Include materials in the learning environment that provide a variety of opportunities for practicing writing and drawing
  - » Markers
  - » Colored pencils
  - » Dry erase boards
  - » Slates with chalk
  - » Bingo markers
  - » Oil pastels
  - » Magnetic writing boards
  - » Playground chalk
  - » Watercolor painting supplies
- Practice writing letters in materials that provide sensory input, such as trays of shaving cream or sand
- Include materials in the learning environment that foster fine motor skills
  - » Geoboards
  - » Legos
  - » Bottles of glue
  - » Tape
  - » Wire
  - » Plasticine
  - » Small beads for stringing
  - » Tops
- Show sensitivity to children’s flexible directionality, and demonstrate left to right directionality with writing and counting, as on a number line

Over time, and with guidance and encouragement, children develop:  
**Small Motor Skills**

Child controls the small muscles in their hands and wrists.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Cuts out a shape, such as a house, with scissors</li> <li>• Uses a pencil to write letters</li> <li>• Makes braided chains of yarn or finger-knits</li> <li>• Uses a large needle and thread to sew a pouch or a pattern</li> <li>• Weaves yarn or strips of paper together</li> <li>• Grips and squeezes a paper punch or pliers</li> <li>• Ties shoelaces in bow</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses saws and hammers to build a construction</li> <li>• Peels carrots and potatoes efficiently with a peeler</li> <li>• Writes using letters that are the same size; stays on line when writing</li> <li>• Knits a scarf</li> <li>• Uses appropriate pressure when writing</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Folds paper into simple origami shapes</li> <li>• Cuts out complex shapes</li> <li>• Print has a consistent shape and size</li> <li>• Learns cursive</li> </ul>

**Ways the educator might support the child’s development:**

- Include materials in the learning environment that foster fine motor skills
  - » Legos
  - » Geoboards
  - » Clay
  - » Yarn
  - » Sewing materials
  - » Hand looms
  - » Scissors
  - » Hole punches
  - » Hammer and nails
  - » Drill
  - » Pliers
- Provide opportunities for children to use their fine motor skills for meaningful work such as
  - » Using a knife to spread cream cheese or nut butter on crackers or celery
  - » Cutting and coring apples with an apple corer
  - » Peeling carrots and potatoes for soup
  - » Tying shoelaces
  - » Using a screwdriver to fix a desk
  - » Knitting a scarf
  - » Making their own books and comics
- Invite a calligrapher to visit the class to demonstrate the beauty of writing
- Encourage children to pay attention to handwriting in the final revision of their writing projects
- Continue to provide time for activities designed to strengthen the muscles in children’s hands
- Provide keyboards for children whose fine motor skills interfere with their ability to express themselves in writing



Photo credit: Justin Weiner

## II. PHYSICAL WELL-BEING, HEALTH AND MOTOR DEVELOPMENT

# C. Sensory Integration

The child uses sight, hearing, smell, taste, touch, proprioception (deep pressure), and vestibular function (balance) to perceive and respond to the world around them.



*Photo credit: Justin Weiner*

## Over time, and with guidance and encouragement, children develop: Sensory Integration

The child uses sight, hearing, smell, taste, touch, proprioception (deep pressure), and vestibular function (balance) to perceive and respond to the world around them.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Has a range of vision that is several feet by the age of four months</li> <li>• Calms while being held as educator dances, sways, or rocks</li> <li>• Tracks objects by moving both eyes together; makes eye contact with educator</li> <li>• See objects at a distance by seven months</li> <li>• Uses eyes, hands, feet, and mouth together to explore the environment (e.g., picks up an object, looks at it, then mouths it and looks at it again)</li> <li>• Hears door closing and looks to see who is coming</li> <li>• Falls asleep when moving (e.g., in sling, stroller, or car)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Nuzzles their face into a freshly washed blanket to smell it</li> <li>• Moves their body to the rhythm of music</li> <li>• When a new food is introduced, makes a face and might spit it out</li> <li>• Feels objects in the environment (e.g., mashes and mixes the food on their high chair tray or, when walking, stops to pat a puddle)</li> <li>• Jiggles (e.g., sits on an educator’s knee and bounces up and down or pulls themselves to stand and bounces on their own knees)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Starts to move body to fit into different spaces (e.g., fits their body into boxes, shelves, or laundry baskets)</li> <li>• Pats, pushes, mounds, and squeezes modeling compound</li> <li>• Enjoys (or shows a dislike for) messy activities</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Notices textures on their clothes (e.g., a lumpy sock or pants made of different fabric than their shirt)</li> <li>• Tries different positions for walking quickly or running (e.g., leaning forward, rotating arms like propellers, or running sideways)</li> <li>• Jumps off a step</li> <li>• Rolls across the floor</li> <li>• Touches everything in their environment</li> </ul>

### Ways the educator might support the child’s development:

- Gently massage, rock, rub, and stroke the child to soothe and comfort
- Create simple, aesthetically pleasing environments in which the child’s senses are both stimulated and calmed
- Give words to the child’s experience of the sensory world (“Yes, I feel you. Do you feel my hand? You smell so good. I see your big eyes looking at me.”)
- Provide teething rings and items that can be chewed on and easily washed
- Create a learning environment that provides opportunities for children to develop their senses; consider including
  - » Natural sunlight
  - » Time for singing with human, rather than recorded, voices
  - » Drums and rainsticks
  - » Toys made of natural materials, such as cloth and wood
  - » Items with different textures for children to feel
- As educators cook, they may offer the child cornstarch or flour to feel
- Talk about smells with children, such as the aroma of cooking or the scent of natural items such as flowers and grass
- Provide time for children to spend in nature
- Invite children to participate in meaningful jobs that require lifting, pushing, pulling, and carrying objects of various sizes and weights
- Create a learning environment that provides opportunities for children to develop their senses; consider including:
  - » Beautiful objects
  - » Heavy objects for children to move and carry, such as phone books wrapped in duct tape or laundry detergent containers filled with sand
  - » Large pieces of cloth in which children can wrap themselves
  - » Opportunities for practicing balance, such as riding a rocking horse
  - » Water and sand tables
  - » Materials that can be stretched, squeezed, and rubbed.

## Over time, and with guidance and encouragement, children develop: Sensory Integration

The child uses sight, hearing, smell, taste, touch, proprioception (deep pressure), and vestibular function (balance) to perceive and respond to the world around them.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Navigates learning environment, occasionally bumping into tables and chairs</li> <li>• Perceives the difference between similar colors (e.g., red and orange)</li> <li>• Turns around and around until dizzy</li> <li>• Expresses preferences about the way things feel (e.g., whether the temperature of the air is too hot or too cold)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Not able to see close up as well as they can far away</li> <li>• Jumps off platforms</li> <li>• Experiments with different kinds of slides and ways to slide</li> <li>• Roughhouses with peers</li> <li>• Swings and holds balance without falling off</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Developing left-to-right visual tracking</li> <li>• Moves around the learning environment easily and successfully</li> <li>• Spends time moving their body into different positions (e.g., upside down)</li> </ul>

### Ways the educator might support the child’s development:

- Invite children to explore different textured materials, such as velvet, felt, satin, cotton, dry leaves, seeds, dirt, and flowers
- Create simple cooking experiences with the children that involve smelling the ingredients, pouring, mixing, and stirring
- Add scents such as lavender or apple pie spice to homemade play dough, checking for allergies beforehand
- Provide opportunities for children to use sensory tables, including light tables and water/sand tables on a daily basis
- Provide a quiet space with soft furnishings that may also include a listening center, soft animals, objects to squeeze, or picture books
- Engage families in conversation about their values around rough-and-tumble play
- Identify and evaluate which local playgrounds have equipment for climbing, swinging, and balancing that meets safety guidelines
- Provide access to experiences that develop the child’s sense of balance
  - » Balance boards
  - » Low balance beams
  - » Tire swings
  - » Bucket swings
  - » Slides
  - » Climbers
- Take the children on listening walks and then talk about what you heard
- Have meetings before rough-and-tumble play to establish safe limits
- Provide activities that engage children’s senses
  - » Rolling down a hill
  - » Wheelbarrow walks
  - » Monkey bars
  - » Rolling and carrying gallon jugs full of water
  - » Cartwheels
  - » Jumping jacks
- Include soft and cozy elements in the learning environment

Over time, and with guidance and encouragement, children develop:  
**Sensory Integration**

The child uses sight, hearing, smell, taste, touch, proprioception (deep pressure), and vestibular function (balance) to perceive and respond to the world around them.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Eye muscles are adequately developed to allow them to move their eyes efficiently across a series of letters</li> <li>• Identifies and describes sensations they find soothing or disagreeable</li> <li>• Propels self on swing by pushing off tree or other surface with their feet, and begins to pump their legs</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Children's senses are well-integrated</li> </ul>	

**Ways the educator might support the child's development:**

- Support children in developing self-awareness about their sensory preferences
- Honor children's requests for quieter environments, movement breaks, or alternative seating
- Reflect with colleagues on options available to children during recess, and add elements to the outdoor environment as necessary
- Provide activities that challenge children to use their senses in coordination:
  - » Bike riding
  - » Cooking
  - » Obstacle courses
  - » Hiking



*Photo credit: Justin Weiner*

## II. PHYSICAL WELL-BEING, HEALTH AND MOTOR DEVELOPMENT

# D. Self-Care

Child cares for their physical well-being.



*Photo credit: Justin Weiner*

## Over time, and with guidance and encouragement, children develop: **Self Care**

Child cares for their physical well-being.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Reaches to find nipple</li> <li>• Indicates to their family member or caregiver when they want to nurse or eat by using crying, sounds, and gestures</li> <li>• Indicates when they are done by turning away from the nipple or bottle</li> <li>• Raises legs during diaper changing</li> <li>• Responds to educator’s language during caregiving activities by making eye contact and smiling</li> <li>• Assists educator in holding their bottle</li> <li>• Reaches for family member or educator when wanting to be hugged or held</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Has a sound or gesture that they use to indicate that they want to nurse or eat (e.g., “Num num”)</li> <li>• Tries new foods according to the cultural expectations of their family and community</li> <li>• For breast-feeding babies, crawls or walks to mother and climbs into lap to nurse when desired</li> <li>• Feels and mouths object to distinguish between food and non-food items</li> <li>• Feeds self-with fingers</li> <li>• Removes loose clothing (e.g., socks, hats, or mittens)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Crawls or toddles toward or away from changing table when educator suggests a diaper change</li> <li>• Holds out hands or pulls them away when educator brings them to the sink for hand washing</li> <li>• Opens mouth for educator to brush their gums and teeth, or, if they would not like their gums to be brushed, closes mouth firmly</li> <li>• Participates in sleeping routines in culturally appropriate ways (e.g., lying down with grandma, gathering blanket and pacifier, or crawling to a rocking chair)</li> <li>• Drinks from an open cup</li> <li>• Undresses themselves completely</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Tries a wider range of textures and flavors of food</li> <li>• For breastfeeding toddlers, begins to have interactions with their mother about when and how they like to nurse</li> <li>• Anticipates and participates in family and/or childcare sleeping routines</li> <li>• Shows interest in toilet training and may start to use toilet regularly with assistance</li> <li>• Washes and dries hands after toileting and before meals, with assistance</li> <li>• Cooperates and assists educator in tooth-brushing</li> </ul>

### Ways the educator might support the child’s development:

- Respond lovingly to the baby’s verbal and nonverbal cues; in this way the child learns that by indicating a need for help, they will be cared for
  - » Hold and rock the baby when they are tired
  - » Feed the baby when they are hungry
  - » Change the baby’s diaper as soon as the baby has urinated or had a bowel movement
  - » Change the baby’s position when uncomfortable
- Create opportunities for redirection, distraction, and substitutions if the child approaches danger
  - » “Ms. Sue’s coffee is too hot, I need to put it away. Here is some milk for you.”
  - » As the child reaches for a cord: “Let’s hold on to this teddy bear. That’s for the lamp, teddy is for you.”
  - » “You are curious about crawling down the stairs. Why don’t I hold your hand while you bump down on your bottom?”
- Actively learn about the caregiving practices of the family
- Critically assess the degree to which all educator–child interactions, including the basic care procedures such as diaper changing, eating, sleeping, and comforting, are similar or different to those of the child’s home
- Commit to making changes in your caregiving practices to better align them with the child’s experiences in the home
- Identify, create, and maintain safe indoor and outdoor environments for the child to explore freely
  - » Cover electrical outlets
  - » Install gates at top and bottom of stairs
  - » Ensure poisons and choking hazards are out of reach
  - » Keep hot liquids outside of learning environment
- Redirect children using positive language and examples. For instance, if a child approaches a baby, show them a gentle touch and say, “Oh, you see her hair! Yes, that’s her hair.”
- Model, mirror, and reflect both actions and reactions (“Thank you. You are doing such a great job of taking care of yourself by getting your coat.”)
- Tell the child that it is time for a caregiving activity, such as diaper changing, and then pause to give the child the opportunity to decide to participate (e.g., getting a new diaper and going to the changing area)
- Narrate your actions as you change the baby’s diaper (“Now I am going to use a wipe to clean off your penis. It is going to feel cold for a minute. It’s all clean now.”)
- When children express their growing autonomy by resisting a caregiving activity, reflect their feelings and gently carry on with the activity (“You don’t want to have your diaper changed right now. You are so mad. We will be done soon. Would you like to hold the clean diaper?”)
- Use picture labels on toy containers and corresponding shelves so that children may clean up independently
- Talk to families about their values. (Are independence and autonomy important to them? In which areas?) Acknowledge different perspectives
- Provide the child with opportunities to do tasks that their family expects them to learn to do independently
  - » Pour their milk and help themselves to a rice cracker from a plate on the table
  - » Dress and undress themselves
  - » Brush their teeth
  - » Set the table for meal times
  - » Put on their shoes
- Offer the child appropriate choices when dressing (“Do you want to wear your star shirt or your elephant shirt?”)
- Post supporting visuals to encourage independence; for example, show the steps of hand washing above the sink or the steps of washing their own cup and plate in the kitchen
- Explore toileting by reading:
  - » *Everyone Poops*, by Taro Gomi.
  - » *Once Upon a Potty*, by Alona Frankel.
  - » *Diapers Are Not Forever*, by Elizabeth Verdick

## Over time, and with guidance and encouragement, children develop: **Self Care**

Child cares for their physical well-being.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Eats socially, as is appropriate for their family and community's culture (e.g. by taking a portion from a common bowl and passing the bowl to the next child)</li> <li>• Communicates to educator when they need to use the toilet</li> <li>• Begins to follow the steps of using the toilet with assistance</li> <li>• Washes hands before eating and after using the toilet, with reminders</li> <li>• Puts on their own coat before going outside</li> <li>• Wipes their own nose with a tissue, with a reminder</li> <li>• Brushes their teeth, with help to reach all areas of the mouth</li> <li>• Recognizes their own cubby to store personal items</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Independently uses the toilet</li> <li>• Independently washes hands before eating and after using the toilet with minimal reminders</li> <li>• Dresses themselves, but may need help with zippers, snaps and buttons</li> <li>• Communicates to educator about their own feelings of being hungry, tired or ill</li> <li>• Brushes their own teeth</li> <li>• After a couple of weeks at school, knows the morning routine such as placing their backpack into their cubby and hanging up their coat</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Manages the contents of their backpack (e.g., takes out their folder and hangs it on their hook when they arrive in school)</li> <li>• Gets lunch on their tray or their lunchbox from their backpack and eats without prompting during lunch time</li> <li>• Safely manages increasing levels of risk in physical play</li> </ul>

### Ways the educator might support the child's development:

- Transition a tired child to a quieter activity or area so that their body can rest
- Provide enough time during transitions so that the children can practice self-help skills such as putting on their coats
- Notice and acknowledge children's growing independence
- Establish times in the daily schedule for toilet use, and remind children who are learning to use the toilet to go more frequently
- Establish good health routines, including tooth brushing, serving healthy foods, and hand washing
- Include materials in the learning environment that foster the development of self-help skills
  - » Accessible sinks
  - » Child-size toilets
  - » Sponges, washcloths, and napkins at a low level
  - » Snack table where they can independently serve themselves food
  - » Pitcher and cups for pouring their own milk or water
  - » Quiet cozy area where they can go when tired
  - » Individual cubbies for personal items
  - » Items in the dramatic play area that allow children to practice self-help skills such as clothes with buttons, snaps and zippers
- Provide opportunities for children to learn about pedestrian, bicycle, and water safety.
- Gently introduce the routines of the learning environment, taking special time with children who did not go to preschool
- For children who eat in school cafeterias, arrange lunch procedures that allow time, space, and appropriate noise levels for children to eat and enjoy their food
- Review rules and protocols for safety procedures such as evacuation drills, crossing streets, and lock down drills before they occur; reflect on children's practice together afterwards
- Observe children closely as they take calculated risks in active play

## Over time, and with guidance and encouragement, children develop: **Self Care**

Child cares for their physical well-being.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Describes the purpose of events at the doctor’s office (e.g., says that a vaccine will keep them from getting sick in the future)</li> <li>• Discusses consent with educators and peers; for example, says, “I would prefer to shake your hand, not give you a kiss.”</li> <li>• Knows to call 911 in an emergency</li> <li>• Knows what bullying is and how to report bullying to a trusted adult</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Differentiates between conflict and bullying</li> <li>• In play with peers, establishes and follows own safety rules (e.g., says, “Let’s play tag, but no pushing hard, just tagging.”)</li> <li>• Checks in with educator before assuming new levels of risk, for example, says, “We are going to go down to play by the woods, ok?”</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Asks questions about laws and regulations that make the community safe</li> <li>• Intervenes when they see a child breaking a safety rule (e.g., attempts to stop a child who is about to ride a bicycle without a helmet)</li> <li>• Is aware that different educators and families have different rules, and they should follow the rules of the adults who they are with</li> </ul>

### Ways the educator might support the child’s development:

- Offer healthy snacks and ask children to try unfamiliar or non-preferred foods
- Provide independent access to Band-Aids
- Provide sufficient time for children to independently put on their own coat, hat, and gloves
- Make plans about what a child should do if separated from the group during outings
- When practicing fire, lockdown, and other drills with children
  - » Invite children to express their fears and provide reassurance and emotional support
  - » Inform families that there was a drill
  - » Provide families with information about how to address children’s fears about safety at school
- Visit a farmer’s market or grocery store and notice the things you see at different times of the year
- Talk about safe and unsafe levels of risk-taking
- Talk about consent with children. Invite them to role play scenarios in which they can practice saying, “This does not feel good to me” and “I don’t like that.”
- Engage in group conversations about conflict and bullying
- Invite police officer or fire fighter to visit the class and speak to the children
- Talk with families about chores that children are expected to do in their family and community
- Invite children to help plan a snack menu and to prepare the snacks
- Invite children to talk about dangers they have on the news or through social media
- Engage children in thinking about the ways laws keep us safe and how laws could be changed to keep us more safe (e.g., gun control legislation)
- Begin a conversation about helping one another stay safe



Photo credit: Shannon Taggart

## II. PHYSICAL WELL-BEING, HEALTH AND MOTOR DEVELOPMENT

# E. Healthy Sexuality

Child develops a healthy relationship to their body, pleasure, and others. This healthy sense of self is supported and demonstrated through respectful, caring, and loving relationships with families, educators, and other children.



## Over time, and with guidance and encouragement, children develop: **Healthy Sexuality**

Child develops a healthy relationship to their body, pleasure, and others. This healthy sense of self is supported and demonstrated through respectful, caring, and loving relationships with families, educators, and other children.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Explores body parts, including their genitals</li> <li>• Prefers to be unclothed</li> <li>• Looks at body parts on self, others, and in mirror</li> <li>• Responds positively to healthy touch from loving adults (e.g., is soothed by massage)</li> <li>• Communicates bodily discomfort (e.g., cries during tummy time or gives strong signal that a different position is preferred)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Enjoys sensual, non-sexual experiences (e.g., breast feeding, thumb sucking, rocking to bed, cuddling)</li> <li>• Expresses delight and a sense of pride in the things their body can do independently (e.g., crawling up stairs, and throwing or dropping objects)</li> <li>• Bats at, touches, grasps, or pulls their genitals during diaper changing</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Touches or rubs their genitals themselves for pleasure (Note: Children this age are not masturbating to orgasm.)</li> <li>• Says “no” or walks away when another child tries touch, hit, or kiss them</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Learns the language for different body parts and their functions (e.g., penis, vagina, or breasts)</li> <li>• Communicates their gender identity (e.g., “I’m a girl!”) and categorizes others by gender</li> <li>• Expresses curiosity about their own body and the bodies of others (e.g., trying to see other people’s bodies or asking questions like: “Why doesn’t Kayla have a wee wee?”)</li> </ul>

### Ways the educator might support the child’s development:

- Talk to families about ways they express care and love for their infant; get to know and respect cultural differences in the way care and love are expressed
- Be mindful when changing children’s diapers, and describe the sensations that children will experience next (e.g., “I am going to use a cold wipe to clean your vagina. So cold! There, I’m all done now”)
- Allow children freedom to explore and observe their bodies
- Avoid sexualizing children’s behavior (e.g. ,“He’s such a flirt”)
- Read books on body parts For example
  - » *My Face Book*, by Star Bright Books
  - » *Hello World! My Body*, by Jill McDonald
  - » *All of Baby Nose to Toes*. by Victoria Adler
  - » *Global Babies*, by The Global Fund for Children
  - » *Where is Baby’s Belly Button?*, by Karen Katz
  - » *Pretty Brown Face*, by Andrea Pinkney
  - » *Busy Fingers*, by C. W. Bowie
- Model respect for children’s bodies by telling them what to expect before touching them or picking them up
- Narrate what you’re doing when you touch them (“I’m going to pick you up now”) so they have a sense that unexpected things don’t just happen to their bodies
- Express healthy, matter-of-fact attitudes about children’s bodies and bodily functions; avoid conveying shame or naughtiness about erections, bowel movements, and other toileting activities
- Explore books about the body and appropriate physical touch by reading
  - » *Whose Toes Are Those?* by Jabari Asim
  - » *More, More, More, Said the Baby*, by Vera B. Williams
  - » *C is for Consent*, by Eleanor Morrison
  - » *Baby Says*, by John Steptoe
  - » *Ten Little Fingers and Ten Little Toes*, by Mem Fox
  - » *Loving Me*, by Debby Slier
  - » *Kiss by Kiss*, by Richard Van Camp
  - » *Full, Full, Full of Love*, by Trish Cooke
- When toilet-teaching, use accurate language to describe genitals; validate children’s curiosity and provide accurate, age-appropriate answers to their questions
- Engage in two-way communication with families regarding toilet teaching , and include
  - » Words for penis and vagina in the child’s home language
  - » Cultural expectations for privacy in the bathroom
- Encourage children to read facial expressions and other body language (scared, sad, frustrated, happy, angry, etc.)

## Over time, and with guidance and encouragement, children develop: **Healthy Sexuality**

Child develops a healthy relationship to their body, pleasure, and others. This healthy sense of self is supported and demonstrated through respectful, caring, and loving relationships with families, educators, and other children.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Expresses positive feelings about their body and actively explores what it can do (e.g., may experiment with different positions for urinating)</li> <li>• Understands that their bodies belong to themselves and that they have a right to say “no” to unwanted touch</li> <li>• Imitates the relationship behavior of adults (e.g., children may engage in “kissing” or “playing house”)</li> <li>• Expresses curiosity about their body and the bodies of others (e.g., a child may examine the “bottoms” of pets and stuffed animals)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Asks questions about their bodies and the bodies of others</li> <li>• Curious about birth, reproduction, and how families are made (e.g., child may ask, “Where did I come from?” or “What makes a baby?”)</li> <li>• Plays “doctor,” taking off clothes and examining peers’ genitals</li> <li>• Seeks bodily pleasure (e.g., may want to cuddle when they wake up from nap or enjoy dressing up in silky dresses)</li> <li>• Masturbates either with their hands or through rubbing their genitals against surfaces like pillows or chairs</li> <li>• Uses “potty talk” to test limits and make people laugh</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses correct names for parts of the body</li> <li>• May be familiar with exploring genitals but still have questions about their functions</li> <li>• Understands that certain bodily activities have particular times and places, and accepts limits (e.g., may pick their nose in the bathroom)</li> <li>• Explores the idea of family and marriage, and understands that some adults are married and that some are not; is aware that there are lots of different ways to make a family</li> </ul>

### Ways the educator might support the child’s development:

- Talk to children about the human body (parts and functions); equip children with accurate vocabulary for their genitals in the same way you provide accurate vocabulary for all of their other body parts
- Model consent throughout your everyday teaching practices; for example, give children options for how they would like to be greeted in the morning (e.g., hug, high five, or wave)
- Communicate with children about your own physical boundaries (“I don’t like when people touch my hair without asking. It’s great to be curious. So, if you are feeling curious about how my hair feels, you can ask me, and I might say yes and I might say no.”)
- Teach children that “no” and “stop” are important words and should be honored in relation to their own bodies and the bodies of others; support children as they begin to learn how to read and respond to others’ non-verbal communication
- Provide straightforward, honest answers to children’s questions, and be mindful to provide answers in ways that are inclusive of all genders, all bodies, and all of the different ways that people make families. (For example, instead of saying, “Girls have vaginas and boys have penises,” you could say, “Many or most girls have vaginas, and many or most boys have penises.”)
- Communicate with families early and often about your policies and practices regarding gender and sexuality
- Avoid overreacting to common (or typical) child sexual behavior like masturbation; set limits without shaming children
- Teach children to ask permission before touching or embracing a playmate, using language such as, “Jasmine, let’s ask Joe if he would like to hug bye-bye.” If Joe says “no” to this request, cheerfully tell the child, “That’s okay, Jasmine! Let’s wave bye-bye to Joe and blow him a kiss instead.”
- Allow children to explore the idea of partnerships with each other, regardless of their gender identity
- Reflect on your own biases and examine your habits, curriculum, and classroom environment for subtle or overt messages children may be receiving about gender, bodies, and relationships
- Actively learn about the families of the children you serve and ensure that your curriculum reflects and honors their diversity and their strengths
- Include books in the learning environment that celebrate all kinds of families
  - » *Dear Child*, by John Farrell
  - » *The Different Dragon*, by Jennifer Bryan
  - » *The Family Book*, by Todd Parr
  - » *Stella Brings the Family*, by Miriam B. Schiffer
  - » *A Family is a Family is a Family*, by Sara O’Leary

## Over time, and with guidance and encouragement, children develop: **Healthy Sexuality**

Child develops a healthy relationship to their body, pleasure, and others. This healthy sense of self is supported and demonstrated through respectful, caring, and loving relationships with families, educators, and other children.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Less interested in exploring sexuality than they were earlier</li> <li>• May continue to masturbate and understand that it is a healthy activity that has a specific time and place</li> <li>• Begins to understand concepts of the body changing as it grows older</li> <li>• Knows that they have agency over and are the experts on their own bodies and gender identity (i.e. they get to decide if they are a boy, girl, both, or something else)</li> <li>• Understands that there are lots of different kinds of loving relationships (e.g. parent, sibling, friend, etc.)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Looks to peers, media, and other sources for information about sex and sexuality; knows that not everything they hear from peers or see on T.V. or the internet is true</li> <li>• Children have questions about sex, crushes, dating, and relationships</li> <li>• May express internalized patriarchy and homophobia through teasing, using sexually explicit language (or slurs), and/or talking about girls' bodies</li> <li>• Expresses their wants and needs with respect to their body (e.g., "Can I have some space?") and respects the wants and needs of others (e.g., will stop roughhousing with a peer when told to)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Some children's bodies are changing (e.g., they may grow breast buds and/or pubic hair)</li> <li>• Knows that many (but not all) grownups fall in love with (and sometimes marry) people of a different gender; understands that it's not accurate to assume that all families have a mother and father and begins to explore many different family structures</li> </ul>

### Ways the educator might support the child's development:

- Check in with families about children's curiosity regarding partnerships and sexuality
- Explore the changing and growing body by comparing photos of when children were younger with what they look like now
- Be sensitive to the variety of family configurations in the classroom in your words and actions. (e.g., avoid saying, "Go home and tell your moms and dads.")
- Nurture children's positive self-image; draw self portraits and talk about what they love and appreciate about their bodies
- Talk to families about their cultural norms and expectations for children's gender and sexuality development
- Learn from families about their children's knowledge of sex and sexuality
- Communicate with families about conversations related to gender and sexuality that arise in the classroom
- Use books to support direct conversations about questions related to sex when they arise
  - » *What Makes a Baby*, by Cory Silverberg
  - » *Sex is a Funny Word: A Book about Bodies, Feelings, and You*, by Cory Silverberg
- Monitor the comments you make about your own and other people's bodies and appearance
- Engage children in ongoing critical literacy activities that support them in developing the skills to analyze literature and media for sexism, sizism, and homophobia

# Physical Well-Being, Health and Motor Development References

Burt, T., Gelnow, A., & Klinger Lesser, L. (2010, January). Creating welcome and inclusive environments for lesbian, gay, bisexual and transgender (LGBT) families in early childhood settings. Reprinted from *Young Children*.

California Department of Education. (2008). *California preschool learning foundations*. Sacramento, CA: Author. Retrieved from <http://www.cde.ca.gov/sp/cd/re/documents/preschoollf.pdf>.

California Department of Education. (2009). *California infant/toddler learning & development foundations*. Sacramento, CA: Author. Retrieved from <http://www.cde.ca.gov/sp/cd/re/documents/itfoundations2009.pdf>.

Chrisman, K. (2002). *Healthy sexuality development: A guide for early educators and families*. New York, NY: NAEYC.

Colorado early learning and development guidelines. (n.d.). Retrieved from [https://earlylearningco.org/pdf/ELDG\\_Guidelines\\_English.pdf](https://earlylearningco.org/pdf/ELDG_Guidelines_English.pdf).

Dombro, A. L., Jewkes, A.M., Marsden, D.B., Meisels, S.J., & Weston, D.B. (2003). *The ounce scale: standards for the developmental profiles (birth–42 months)*. New York, NY: Pearson Early Learning.

Dichtelmiller, M.L. (2013). *The work sampling system omnibus guidelines (preschool through third grade)*. New York, NY: Pearson.

High Scope Educational Research Foundation. (n.d.). *Preschool child observation record*. Ypsilanti, MI: Author.

Irving Harris Foundation Professional Development Network. (2012, updated 2018). *Diversity-informed tenets for work with infants, children, and families*. Chicago, IL: Irving Harris Foundation. Retrieved from <https://imhdivtenets.org/tenets/>.

Kellogg, N. D. (2009, August 31). *Clinical report—the evaluation of sexual behaviors in children*. American Academy of Pediatrics, 992–999.

Marotz, L., & Allen, E. K. (2015). *Developmental profiles: Pre-birth through adolescence*. (8th Ed.) Boston, MA: Cengage Learning.

National Academies of Sciences, Engineering, and Medicine. (2018). *How people learn II: Learners, contexts, and cultures*. Washington, DC: National Academies Press.

Nicholson, J., et al. (2019). *Supporting gender diversity in early childhood classrooms: A practical guide*. London, England: Jessica Kingsley Publishers.

Office of Head Start. (2015). *Head Start early learning outcome framework*. Washington, DC: U.S. Department of Health and Human Services.

Office of Head Start. (2018). *Revisiting and updating the multicultural principles for Head Start programs serving children ages birth to five*. Retrieved from <https://eclkc.ohs.acf.hhs.gov/culture-language/article/multicultural-principles-early-childhood-leaders>.

Teich, N. (2012). *Transgender 101: A simple guide to a complex issue*. New York City, NY: Columbia University Press.

Washington State Department of Early Learning. (2012). *Washington State early learning and development guidelines: Birth through 3rd grade*. Olympia, WA: Author. Retrieved from [www.del.wa.gov/development/benchmarks/Default.aspx](http://www.del.wa.gov/development/benchmarks/Default.aspx).

Wood, C. (2018). *Yardsticks: Child and adolescent development 4–14*. (4th Ed.). Turners Falls, MA: Center for Responsive Schools.

Zero to Three. (2015). *Critical competencies for infant-toddler educators*. Washington, DC: Author. Retrieved from [www.zerotothree.org/resources/1197-zero-to-three-critical-competencies-for-infant-toddler-educators-related-professional-criteria#downloads](http://www.zerotothree.org/resources/1197-zero-to-three-critical-competencies-for-infant-toddler-educators-related-professional-criteria#downloads).

## II. Social and Emotional Development

- A. Trusting Relationships with Adults
- B. Sense of Belonging
- C. Sense of Self
- D. Empathy
- E. Cooperation and Negotiation
- F. Emotional Self-Regulation
- G. Rhythms, Rules, and Routines

# Social and Emotional Development

The trusting relationships that children form with responsive adults in infancy and early childhood lay the foundation for all the learning that will come later. The baby's favorite thing to look at is their mother, father, or other significant family member's face, and their favorite sound to listen to is that person's voice. The baby is completely attuned to the person they are depending on to meet all of their physical and emotional needs. Through predictable and loving interactions, babies develop secure attachments to their family members and educators. They are able to confidently explore the world because their beloved people are there for them.

Early attachment relationships are critically important. They predict children's ability to grow into resilient adults, who can regulate their emotions, engage in interactions, and resolve conflicts. Early childhood educators form trusting relationships with children when they notice and attend to children's physical, emotional, and learning needs. Educators can also support the development of the child's healthy attachment relationships to their family. They do this when they respectfully acknowledge the family as the expert on their child's development and promote the family's positive feelings about their child.

Children with strong attachment relationships learn, over time, to regulate their feelings. They develop the ability to express a socially and culturally acceptable range of feelings. When children have insecure early attachments, they feel the need to test the security of all of their relationships. They may have learned that expressing themselves results in negative reactions, causing insecurity, mistrust, and fear. Educators support children's

self-regulation by being warm and reassuring and providing the predictable limits and consistent routines children need to feel safe. Educators can prepare to care for children by taking good care of themselves, resting and eating well, reflecting with trusted colleagues, and asking for help when they need it.

Children travel between the social worlds of their home and their learning environment. It is important for their emerging sense of self that they feel they belong in each place. For many children, the cultural values and expectations of home are very different from those of the learning environment. For example, early learning environments often promote independence and self-sufficiency. This is evident in expectations that children will be able to care for themselves and put themselves to sleep from an early age. Many families value helping one another and think that it is right for older people to assist and comfort younger ones. Educators can promote children's positive sense of self and belonging by engaging in ongoing two-way communication with families to align their expectations, values, and caregiving practices.

As children enter the preschool and primary years, their relationships with other children become increasingly important to them. Social skills, such as empathy, cooperation, and negotiation, are developing at this time. Modeling social skills is important at this age, as children learn from educator's own efforts at self-regulation and conflict resolution.

## The Pyramid Model in New York:

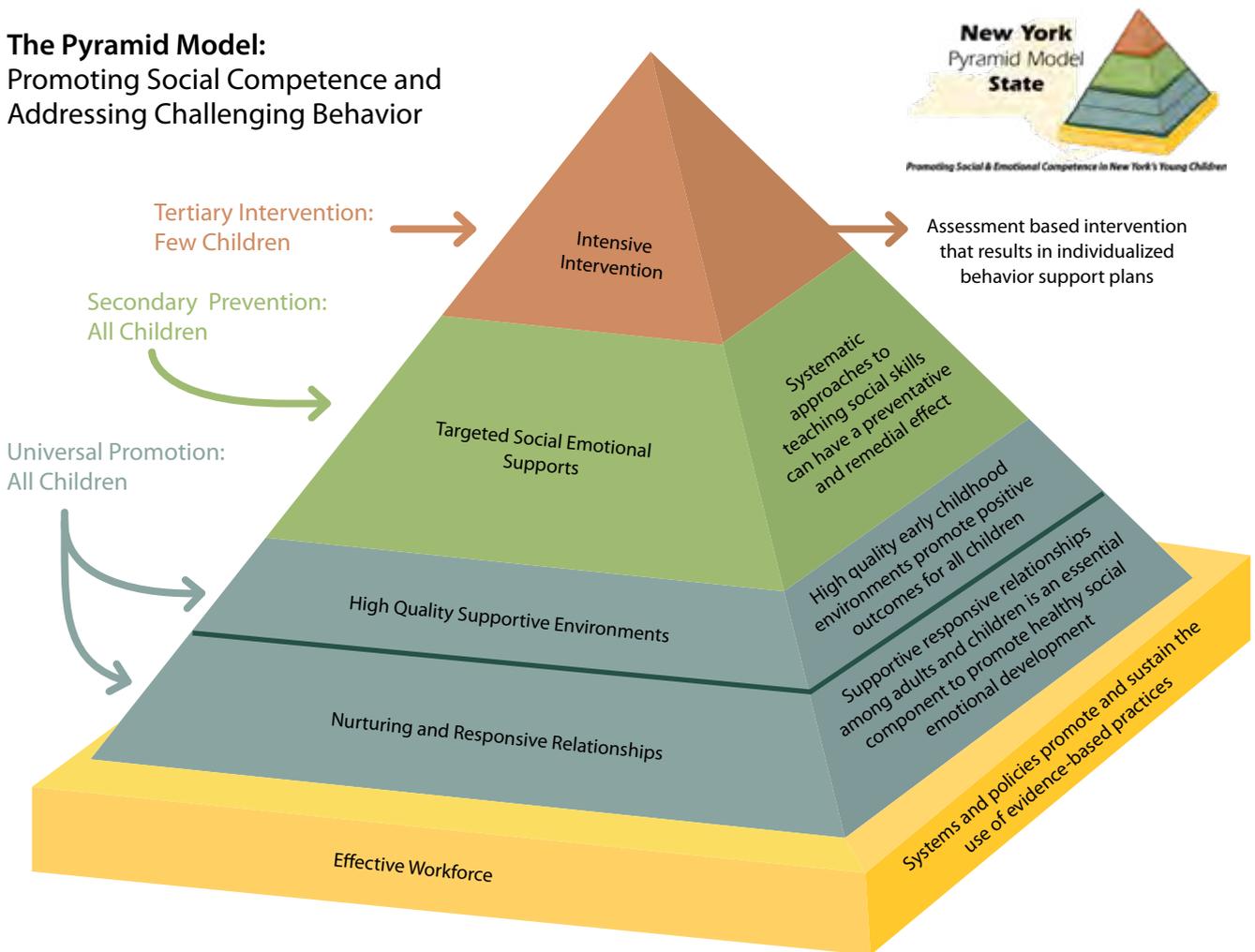
Early childhood leaders in New York State identified a critical need to better support and teach young children and families social and emotional skills. In response, the New York State Council on Children and Families took the lead in 2015 to bring together a team of public and private agencies to form a Pyramid Model State Leadership Team to guide the implementation across the state. The New York State Pyramid Model Leadership Team is promoting the statewide use of the Pyramid Model, an evidence-based framework proven to be an effective approach to building social and emotional competence in all early care and education settings. For more information please go to <http://www.nysecac.org/contact/pyramid-model>.

### Goals

- Increase the number of early childhood trainers and coaches providing professional development to the early childhood workforce on the Pyramid Model practices **to meet** the social and emotional development needs of young children
- Support partnerships between educators and families
- Eliminate the suspension and expulsion of children under six in New York
- Support the implementation and sustainability of the Pyramid Model in all early childhood settings
- Evaluate the effectiveness of implementing the Pyramid Model in New York State

The “ways the educator might support the child’s development” sections of the Early Learning Guidelines are aligned with practices endorsed by the Pyramid Model. They are designed to create learning environments in which every child feels they belong; promote children’s social engagement and positive relationships; and teach children routines, expectations and problem-solving strategies that will help them to be successful.

### The Pyramid Model: Promoting Social Competence and Addressing Challenging Behavior



### III. SOCIAL AND EMOTIONAL DEVELOPMENT

# A. Trusting Relationships with Adults

Child develops trusting relationships with nurturing adults.



## Over time, and with guidance and encouragement, children develop: Trusting Relationships with Adults

Child develops trusting relationships with nurturing adults.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Quiets when comforted by familiar adult, most of the time</li> <li>• Shows preference for familiar educator through facial expressions and gestures (e.g., smiles or laughs)</li> <li>• Initiates and maintains interactions with educators (e.g., smiles, gestures, or verbal expression)</li> <li>• Cries, makes sounds, or uses body movements to signal caregiver for assistance, attention, or need for comfort</li> <li>• Looks for educators’ response in uncertain situations (e.g., when stranger enters the room)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Explores environment with guidance from trusting adults</li> <li>• Seeks security and support from primary educator</li> <li>• Exhibits separation anxiety by staying close to familiar adults in presence of strangers</li> <li>• When in a new situation, will make eye contact with trusted adult to “check in” with them</li> <li>• Tests and confirms educators’ responses to own behavior (e.g., reaches for a forbidden object and looks at educator to check response)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Indicates need for assistance from a trusted adult (e.g., looks to adult and points to ball to indicate they need help when a ball rolls under shelves)</li> <li>• Periodically checks with caregiver for help or reassurance when playing alone or with peers (e.g., moves body to caregiver to get a hug then goes back to playing)</li> <li>• Initiates interactions and plays with adults (e.g., brings book for adult to read)</li> <li>• Responds to adults’ verbal greetings either verbally or nonverbally by, for example, waving or blowing a kiss</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Imitates adult activities (e.g., pretends to cook or “reads” next to adult who is reading)</li> <li>• Communicates with adults about recent activities. (e.g., “Mama and I went to the store.”)</li> <li>• May show discomfort with separation or new situations when familiar caregiver is not present (e.g., by protesting loudly, crying, or withdrawing)</li> <li>• Seeks adult assistance with challenges but may become angry when help is given. (e.g., “Help please, I do it myself.”)</li> </ul>

### Ways the educator might support the child’s development:

- If possible, visit families in their home, and talk to them about their values, culture, strengths and needs
- Identify a primary caregiver for each child who carries out most of the daily routines and gets to know the child and the family well. The primary caregiver is responsible for the child’s records, for monitoring the child’s development and maintaining close ties with the family
- When making primary caregiving assignments, consider:
  - » Home language of the child
  - » Cultural continuity with the child’s family
  - » Educator and child schedules
  - » Educator and child dispositions
- Create a learning environment that is a welcoming and predictable place for all children and families—one that feels safe, relaxed, and comfortable for all members of the community
- Create a comfortable place for breastfeeding within the classroom, and use images and signs to let families know that breastfeeding is welcome in your program
- Schedule regular meetings with the child’s family during which you invite families to raise issues openly, collaboratively discuss the child’s development, and identify ways in which you can work together
- Meet children at their level; sit or lie down on the floor with them, and use a low stool so that you may sit at the table at their level
- Interact with individual children during routines and activities (e.g., singing during feeding and diaper changing and using their name)
- Openly share observations and information with families at drop-off and pick-up
- Nurture child with kind words and positive engagement (e.g., hug, cuddle, sing, read, dance, play, etc.)
- Make reading an intimate experience (e.g., hold child in lap while reading, and pause to talk to them about the pages they are interested in)
- Use a positive approach with children, telling them what they can do versus what they can’t (e.g., “In the classroom we use walking feet, and you can run or jump when we go outside.”)
- Connect families to community supports such as parenting programs, book groups, and peer learning communities
- Welcome the child as they are coming back to check in with you, and express confidence in their ability to go out and explore the world
- Observe children playing independently and offer guidance when needed (e.g., “I see you want to play with a truck with Diego. I found a truck you can play with.”)
- Listen carefully and with interest to what the child says and expand on the conversation. (e.g., “When you went to the park, Daddy brought you an apple? What color was it? I like apples too.”)
- Thank the child when they follow directions or help another child.

## Over time, and with guidance and encouragement, children develop: Trusting Relationships with Adults

Child develops trusting relationships with nurturing adults.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Separates with assistance from significant adults and transitions to educator</li> <li>• Asks for educator’s assistance with an activity they want to do (e.g., asks educator to hold their hand as they balance along a curb)</li> <li>• Brings simple problem to adults attention (e.g., informing them a tricycle has gotten stuck)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Asks for help in completing projects that they are interested in but that are beyond their physical capabilities (e.g., asks caregiver to tape corners of cardboard construction together)</li> <li>• Carries out actions to please adults at times (e.g., cleans up at clean-up time)</li> <li>• Expresses feelings about adults (e.g., “I love Auntie because she always plays with me.”)</li> <li>• Follows educators’ guidelines for appropriate behavior in different environments</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Interacts with significant adults outside of the family and classroom (e.g., speaks with the bus driver and cook)</li> <li>• Seeks guidance from family members, educators, and other familiar adults</li> <li>• Transitions into unfamiliar settings with the assistance of a familiar adult</li> </ul>

### Ways the educator might support the child’s development:

- Build relationships with individual children throughout the day (e.g., during small groups, one on one play with child, conversation at meal times, etc.)
- Create predictable separation routines at drop-off
- Meet children’s caregiving needs promptly and empathetically (e.g., when a child has a toileting accident, shows compassion and respect)
- Listen to children and show you value what they are saying by acknowledging them and expanding upon their ideas
- When a child is talking with you, get down at their level, either by sitting in a chair or on the floor; allow the child to talk and explain as much as possible
- Thank child for coming to get you in times of need
- Talk to the family about their hopes and dreams for the child, and hold that image in your mind
- Notice when the child may need comfort and reassurance and provide support, even when they do not ask for it
- Promote the idea that everyone shares the responsibility for the well-being of children
- Use observation, recording, and reflection to notice the areas in which children are struggling and plan to offer them extra support in those areas
- Ask open-ended questions to sustain conversations with children
- Assist children in sustaining interactions in play by modeling, cooperating, helping, and suggesting new ideas for play
- Help the child identify community members they can trust and ask for assistance (e.g., home visitors, mentors, older extended family members, or caring individuals within the community at large)
- Show interest in the child’s other interpersonal relationships (e.g., “What do you and Gus the bus driver talk about when he takes you home?”)
- Take time to do something that you know is special for the child (e.g., ask them to teach you some words in their home language)

## Over time, and with guidance and encouragement, children develop: **Trusting Relationships with Adults**

Child develops trusting relationships with nurturing adults.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Greets educators or other adults when arriving in the learning environment</li> <li>• Engages in informal conversations with adults (e.g., talks with educator every day about what their new kitten is doing)</li> <li>• Seeks educator’s assistance when a group of children cannot agree on the rules for a game</li> <li>• Seeks educator’s advice on how to deal with a conflict with a friend</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Discusses a problem with classroom teacher, resource teacher, or volunteer</li> <li>• Talks to educators and staff about what they do at home with their family</li> <li>• Seeks assistance from an educator when a task is too difficult to accomplish by themselves</li> <li>• Initiates conversation with adult to “be together”</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Respectfully engages adult with a different viewpoint and considers adult’s alternative suggestions in conversation (e.g., listens to adult share views about a movie and offers a different viewpoint)</li> <li>• Volunteers to help educator with tasks (e.g., staple or hand out papers)</li> <li>• Identifies family, school, and community strengths and supports</li> </ul>

### Ways the educator might support the child’s development:

- Help children and families identify and develop supportive relationships with family, friends, neighbors, co-workers, community members, and service providers
- Model language of assistance and support (“How can we work together to figure this out?”)
- Establish lines of help with children (“You can come to me or the assistant if you need support.”)
- Take a request for support as a true need. (Respond, for example, “I can help you with that. What have you tried so far?”)
- Chart or map grownups with whom kids have special relationships, both in the school community and outside
- Foster the family’s positive regard for their child by taking a strength-based stance when sharing observations
- When addressing sensitive issues with a child and/or their family, be sure to do so in privacy. Convey respect and compassion
- Thank the child for coming to you when they have a problem, and affirm your desire to be a resource for them



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### III. SOCIAL AND EMOTIONAL DEVELOPMENT

# B. Sense of Belonging

Child experiences a sense of belonging in environments that link, extend, and affirm the child's family and community. Child expresses comfort and joy with human diversity.



## Over time, and with guidance and encouragement, children develop: Sense of Belonging

Child experiences a sense of belonging in environments that link, extend, and affirm the child’s family and community.  
Child expresses comfort and joy with human diversity.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Expresses contentment or joy when trusted adult is present</li> <li>• Develops cultural identity through daily caregiving interactions, household smell, sounds</li> <li>• Babbles a range of sounds and imitates intonation and sounds of the home language(s)</li> <li>• Looks more at faces that resemble the faces of familiar, trusted adults</li> <li>• May react to and/or interact differently with others who do not resemble their family members and who speak other languages or language variations</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Plays beside other children</li> <li>• Demonstrates ease and comfort when spoken to in their home language</li> <li>• Cries when family member leaves</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Displays ease and comfort in a variety of places when with familiar adults</li> <li>• Follows familiar routines (e.g., knows what chair is theirs when meal time occurs)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Identifies self as a member of a family; talks about family members who are not present</li> <li>• Is curious about physical characteristics of self and others (e.g., skin color, hair texture, or gender anatomy)</li> <li>• May begin to use social labels such as race to describe people and “match” them based on physical characteristics</li> <li>• Asks simple questions about other children. (e.g., “Where’s Tommy?” “What’s he doing?”)</li> <li>• May begin to show fear, discomfort, or dislike toward people who look or speak in unfamiliar ways</li> </ul>

### Ways the educator might support the child’s development:

- Talk to the family about their caregiving practices and adopt similar practices in the learning environment
- Help families identify, find, and receive supports needed to grow and thrive (e.g., food, housing, mental health resources, and books in the home)
- At a minimum, learn a few simple and essential words, especially greetings, in families’ home language
- Provide opportunities for the baby to interact with all kinds of people by taking them on community walks and introducing them to neighbors
- Express togetherness. Smile when the baby smiles, laugh when they laugh; (“I am happy to be with you.”)
- Affirm the baby’s choice to seek comfort and care from an educator who shares their racial, linguistic, or cultural background
- Show empathy and acceptance of children’s feelings, and be emotionally close
- Be open to close physical contact with the child; allow children to hold your hand and sit in your lap
- Encourage a sense of belonging within the classroom by having homelike touches, including pillows, pictures of the children’s families (at eye level), comfort items, and a place to hold the child’s belongings
- Participate in cultural events in the community
- Invite families to make family books or share photo albums of people who are important to the child; keep these in a place that is accessible to the child
- Ensure that the materials in the learning environment incorporate home cultures and introduce diversity through books, posters, and puzzles
- Allow objects that are important to the child and representative of their family, community, and culture to be brought into the learning environment
- Encourage children of all genders to play with a wide variety of toys (dolls, puzzles, dress-up, trucks, etc.)
- Invite families to celebrate the child’s culture and traditions with the group (e.g., family comes to school snack time and serves sushi to children)
- Gently introduce the child to a new learning environment, verbally and physically showing the child items to be played with and places their caretaking needs will be met; allow the child to observe and enter the environment at their own pace
- Point out familiar items or people within the environment (“Look, Susie is here! You played with Susie yesterday with the cars.” “There is a maraca; you have a maraca like this at home.”)
- Facilitate the initiation and inclusion of children in play

## Over time, and with guidance and encouragement, children develop: Sense of Belonging

Child experiences a sense of belonging in environments that link, extend, and affirm the child’s family and community.  
Child expresses comfort and joy with human diversity.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses pretend play to explore, practice, and understand social roles</li> <li>• May assign roles to other children during dramatic play that reflect their lived experience (e.g., “You be the Mama, and I’ll be the Papa with the baby.”)</li> <li>• Identifies gender and other similarities and differences between self and others; may draw conclusions based on stereotypes and personal experience</li> <li>• Notices differences, and may ask why (e.g., “Why is he in a wheelchair?”)</li> <li>• Children may begin using their home language in certain places and times or with certain people</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Identifies self as a member of a group (e.g., refers to our family, our school, our faith, or our culture)</li> <li>• Begins to show evidence of internalized superiority or internalized oppression based on race, ethnicity, class, gender, religion, ability status, family structure, body size, and/or language</li> <li>• Adjusts behavior to different settings (e.g., family vs. learning environment)</li> <li>• Compares similarities or differences of others (e.g., height, hair color, or skin tone)</li> <li>• Seeks out people and objects in the learning environment that affirm their sense of belonging (e.g., educator who shares their home language, family photo, item from home)</li> <li>• Develops their own theories about what causes differences in ability, gender, and skin color</li> <li>• May mask fear of differences with avoidance and/or silliness</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• When a child’s home culture or experience differs from the dominant or mainstream culture, they may             <ul style="list-style-type: none"> <li>» Reject their home culture and adopt the dominant one</li> <li>» Reject dominant culture and insist on home culture</li> <li>» Learn to adjust behavior and to become bi-cultural</li> </ul> </li> <li>• When a child’s home culture and experience has been affirmed, they may express pride in their racial, linguistic and cultural identity</li> <li>• When a child’s home culture or experience aligns with dominant or mainstream culture, they may             <ul style="list-style-type: none"> <li>» Internalize a false sense that they are “normal” or superior</li> </ul> </li> <li>• Prefers a child who speaks their own language or language variation as a friend</li> </ul>

### Ways the educator might support the child’s development:

- Describe gender as how a person feels (“Josie is a boy because Josie feels like a boy on the inside.”)
- Make the child’s home language seen and heard in the learning environment
- Adapt curriculum and materials in the learning environment so that all children are able to participate
- Connect families in their learning environment to one another
  - » Family breakfast in the classroom or program
  - » Book groups
  - » Parenting reflection groups
- Encourage families to engage in play-based learning activities in their home language
- Accept silence or quiet observation as an acceptable way for children to participate, particularly when they are new to the learning environment or if that is consistent with their personality
- Reflect on your own biases and the ways those biases manifest in your interactions with children, colleagues, and families
- Welcome children’s questions about difference. (“You are noticing your skin color is different than mine. What words would you use to say what color my skin is?”)
- Include books and materials within the learning environment that respect and honor differences and those by authors of different backgrounds (e.g., culture, gender, ethnicity, language, and abilities)
- Ask families to send in photos of things that are meaningful to each child, such as foods, celebrations, and family activities; use pictures to make personalized posters, displays, and class books
- Ask families to bring familiar objects from their home, such as music, instruments, household items, clothing, and toys, and encourage children to talk about and use them in the classroom
- In non-parochial schools, refrain from celebrating religious holidays, such as Christmas; instead invite families to visit the class and share their cultural traditions
- Invite family members into the classroom and talk to them as part of a study of families, careers, or interests
- Engage families in conversations about their national and family origins to affirm positive social identities
- Record families telling stories in their home language and include them as part of your listening center/library
- Intentionally plan activities to counter potential overgeneralizations or existing stereotypes
- Engage children in conversation about unfair social differences, including wealth and power
- Model and explain accurate and appropriate vocabulary for different social groups. For example, name your own racial identity
- Teach children about what causes differences in skin color using books like *All the Colors We Are: The Story of how We Get Our Skin Color*, by Katie Kissinger

## Over time, and with guidance and encouragement, children develop: Sense of Belonging

Child experiences a sense of belonging in environments that link, extend, and affirm the child’s family and community.  
Child expresses comfort and joy with human diversity.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Shows evidence of social messages affecting how they feel about their self and group identity (e.g., evidence of internalized superiority or internalized oppression)</li> <li>• Knows that insults related to race, gender, and cultural identity are hurtful</li> <li>• May choose to play only with children close to their gender, racial, or cultural identities</li> <li>• Explores the similarities and differences in the home cultures of their peers</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Represents themselves as part of racial, cultural, linguistic, or national groups</li> <li>• Forms groups of friends who share their gender, racial or cultural identities</li> <li>• Describes how they adjust their behavior between home and the learning environment</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Exhibits understanding of larger concepts related to self and belonging (e.g., safety, respect, kindness, and care for objects, self, and others)</li> <li>• Identifies gender and racial stereotypes in books and media</li> <li>• Knows some historical facts about their family, community, and culture</li> <li>• May disengage from learning if they feel like they do not belong at school</li> </ul>

### Ways the educator might support the child’s development:

- Convey to families that you respect them as their child’s best advocate
- Create opportunities for children to know each other by interviewing each child in a group as part of a name study or family study
- Incorporate the four goals of Anti-Bias Education (listed below) into the daily curriculum
  - » Each child will demonstrate self-awareness, confidence, family pride, and positive social identities
  - » Each child will express comfort and joy with human diversity; accurate language for human differences; and deep, caring human connections
  - » Each child will increasingly recognize unfairness, have language to describe unfairness, and understand that unfairness hurts
  - » Each child will demonstrate empowerment and the skills to act, with others or alone, against prejudice and/or discriminatory actions
- Support a strong classroom community by allowing children to learn about one another informally and formally
- Read stories and books to the class that reflect the diversities represented therein
- Use maps to allow children to locate their homes in the community and their national origins
- Connect families to work together on volunteering in the classroom, on fundraising projects, and chaperoning field trips, etc.
- Include community-building games in the daily routine at morning meeting and closing meeting
- Suggest out-of-school time connections for children; recommend to families of specific children which classmates or afterschool programs may be good matches, and include this suggestion in mid-year reports and meetings
- Create multiple opportunities each week for children to share personal experience with their classmates. (e.g., include sharing about their lives or reading aloud personal narratives at daily morning meeting)
- Provide class-wide opportunities for children to build their own social context
  - » Write get-well notes to classmates who are ill for many days
  - » Make “celebrating you” booklets on children’s birthdays in which each child contributes a note or drawing for the birthday child
- Incorporate social justice into your curriculum, providing opportunities for children to engage in inquiry and action around social issues that they care about in their community

### III. SOCIAL AND EMOTIONAL DEVELOPMENT

# C. Sense of Self

Child develops a sense of self through noticing and developing their own interests, preferences, and abilities. Child increasingly develops self-awareness, confidence, family pride, and positive social identities.



## Over time, and with guidance and encouragement, children develop: Sense of Self

Child develops a sense of self through noticing and developing their own interests, preferences, and abilities. Child increasingly develops self-awareness, confidence, family pride, and positive social identities.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Discovers body parts and explores own body (e.g., observes hands, reaches for toes)</li> <li>• Explores the face and other body parts of others (e.g., touches caregivers’ mouth, hair, or hands)</li> <li>• Responds with gestures (waves hands, smiles) or vocalizations (squealing) when name is spoken</li> <li>• Protests when they do not want to do something (e.g., arches back to avoid sitting in chair)</li> <li>• Looks at self in mirror</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Smiles at self in mirror</li> <li>• Makes choices about what toys to play with</li> <li>• Plays with one object more often than others</li> <li>• Has favorite foods, comfort objects, people, etc.</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Expresses thoughts and feelings by saying “no!”</li> <li>• Uses name or other family label (e.g., nickname or birth order such as “little sister”) when referring to self</li> <li>• Shows pride in accomplishments/achievements (e.g., smiles after making hand print)</li> <li>• Expresses comfort with and preference for foods and songs that are culturally familiar</li> <li>• Recognizes and calls attention to self, by pointing, when looking in the mirror or at photographs</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Understands that they are a separate person</li> <li>• Refer to themselves as “me” (e.g., “Me big.”)</li> <li>• Tests limits and strives for independence</li> <li>• Communicates with phrases such as “I doing this,” “I don’t do this,” “I can do this,” or “I did this”</li> <li>• Identifies objects as belonging to them, such as a lunchbox or a stuffed animal. (e.g., “That’s mine!”)</li> <li>• Makes choices (e.g., what toys to play with or what clothes to wear)</li> <li>• Communicates their gender identity (e.g., “I’m a girl!”) and categorizes others by gender</li> </ul>

### Ways the educator might support the child’s development:

- Visit families in their home; ask them to share the child’s strengths, needs, and preferences with you
- Welcome families to the learning environment
  - » Greet families in their home language
  - » Let families know they may stay in the learning environment for as long as they like
  - » Learn how to pronounce the child’s name accurately
- Engage with the child by making eye contact, and narrating what the child is doing. (“I see that you are looking at your hands. Oh look! Your hand is touching your nose.”)
- Show the child they are important by physically nurturing and responding promptly to their needs
- Hang photographs of children and families at child’s level; talk to children about these pictures, especially when they are missing their caregivers
- Hang a mirror on the wall at eye level; comment lovingly on similarities between the educator’s image and the child’s
- Acknowledge the child’s choices and preferences (“You really liked that applesauce.”)
- Intentionally reflect and affirm marginalized aspects of children’s social identities; for example, use books like *I See Me*, by Margaret Manuel, to highlight the beauty of Okanagan culture and language
- Practice cultural humility
  - » Take time to critically reflect on your own values, beliefs, experiences, and culture
  - » Address power dynamics in your relationships with families
- When culturally appropriate, allow the child opportunity to complete a task on their own before offering help
- Take pleasure in the child’s attempts and successes by verbally expressing delight (“You did it!”)
- Model positive self-talk (“Wow! Look at my strong legs! They help me run so fast!”)
- Use songs and tell stories that are rooted in children’s home languages and cultures
- Provide the child with a variety of materials and experiences to help them discover preference and abilities; add materials based on child’s interests
- When appropriate, provide choices and respect children’s preferences (“Would you like to brush your teeth first or go to the bathroom first?”)
- Proactively deepen your knowledge of children’s families, communities, and cultures so that you can provide culturally responsive care
- Include books in the learning environment that promote a positive sense of self
  - » *My Heart Fills With Happiness*, by Monique Gray Smith
  - » *I Can, Can You?* by Marjorie W Pitzer

## Over time, and with guidance and encouragement, children develop: Sense of Self

Child develops a sense of self through noticing and developing their own interests, preferences, and abilities. Child increasingly develops self-awareness, confidence, family pride, and positive social identities.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• May talk to self and/or engage in conversations with imaginary playmates</li> <li>• Describes self by physical attributes and gender</li> <li>• Uses personal pronouns (I, me) rather than referring to self in third person</li> <li>• Chooses preferred activities (e.g., painting, doing puzzles)</li> <li>• Expresses self in different roles during pretend play</li> <li>• Exerts will and preferences with actions and language</li> <li>• Acts as though they are capable of doing new tasks and activities (e.g., copies use of adult tools, tries to sweep the floor with adult sized broom)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Describes family members and the structure of their family</li> <li>• Describes self by physical attributes, abilities, and feelings</li> <li>• Experiments by trying new activities and testing their abilities</li> <li>• Identifies feelings, likes, and dislikes, and expresses own ideas and opinions; begins to be able to explain why they have them</li> <li>• Becomes aware of and explores the meaning of their racial, cultural, gender identities; understands that they are a member of various social groups that have names (e.g., White, Black, African American, Dominican, Muslim, boy, transgender, etc.)</li> <li>• Children begin to internalize gender stereotypes and may begin to conform to society's gendered expectations for their own behavior and/or express gender biases (e.g., only boys play with blocks or only girls wear dresses)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Identifies and expresses own interests, preferences, and abilities</li> <li>• Confidently expresses likes and dislikes</li> <li>• Has unrealistic positive overestimations of their own abilities</li> <li>• Compares or contrasts self to others (e.g., physical characteristics, preferences, abilities, and feelings)</li> </ul>

### Ways the educator might support the child's development:

- Assist child in exploring "All about Me" by making collages and books with pictures and captions; include the family, extended family, and community members when possible
- Affirm children's self-identification and model accurate and appropriate vocabulary around race, ethnicity, and gender
- Encourage children to try new things and talk with them about their impressions
- Observe children's interests and plan activities to support them
- Create opportunities for the child to make meaningful decisions (e.g., what to name the pet fish)
- Ensure that children's home languages are visible in the classroom, in the library, and on charts and labels
- Acknowledge children's accomplishments when they have solved a task or problem on their own
- Encourage all types of play for children of all genders (for example, allow boys to hold the babies and pretend to breastfeed; allow girls to splash in mud puddles)
- Include books in the learning environment that can support your ongoing conversations about gender and gender stereotypes, and affirm a wide variety of gender identities and expression, such as
  - » *Who Are You?* by Brook Pessin-Whedbee
  - » *I'm Jay, Let's Play*, by Beth Reichmuth
  - » *Julian is a Mermaid*, by Jessica Love
- Talk to the child's family to learn about their strengths, knowledge, and experiences
  - » Home languages
  - » Traditions
  - » Friends and family members
  - » Caregivers and caregiving practices
  - » Educational activities
  - » Chores
  - » Family outings and trips
  - » Occupations
  - » Scientific knowledge
- Make the families' strengths, knowledge, and experiences present in the classroom through materials, curriculum, field trips, and conversation
- Provide paint, markers, crayons, construction paper, and other materials in a range of skin tones that children can utilize in their artwork
- Teach children about some of the different words people use to describe their identities
- Gently intervene when you notice children enforcing rigid gender roles. For example, if you overhear a child saying, "You can't play with us! Only boys can be firefighters," you can ask, "Is that true? I don't think it's accurate to say that only boys can be firefighters. There are many women firefighters."
- Allow children to hold responsibilities within the classroom
- Provide opportunities for child to attempt new tasks without prompting or reinforcement
- Showcase children's cultures, interests, and capabilities
  - » Create an art gallery of children's work
  - » Use study examples and displays created by children
  - » Verbally reinforce children's thinking process, capabilities, and accomplishments
  - » Encourage children to demonstrate and share their own uniqueness
- When doing introductions, invite all members of the community to share their gender pronouns along with their names "What words would you like us to use when we talk about you? When people talk about me, I like them to say 'she/her'."
- Actively celebrate children's marginalized social identities and validate their observations of injustice; acknowledge and talk about their healthy feelings of confusion, sadness, fear, and anger in individual, small group, and whole group conversation
- Explore feelings, confidence in one's abilities, and identity using books like
  - » *Katy and the Big Snow*, by Virginia Lee Burton
  - » *Be Boy Buzz*, by bell hooks
  - » *I Love My Hair!* by Natasha Ana Tarpley

## Over time, and with guidance and encouragement, children develop: **Sense of Self**

Child develops a sense of self through noticing and developing their own interests, preferences, and abilities. Child increasingly develops self-awareness, confidence, family pride, and positive social identities.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Shows satisfaction and pride in their work (e.g., expresses joy when they are selected to work on a new science project)</li> <li>Compares abilities to those of their peers</li> <li>Seeks approval of abilities from peers and adults</li> <li>Can name some of their group identities and express how they feel about being a member of those groups</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Describes likes, dislikes, needs, wants, strengths, challenges, and personal opinions</li> <li>Asks for help from a educator or peer when a task is too difficult to accomplish alone (e.g., “Can you help me with this math problem? I don’t remember how to do it.”)</li> <li>Identifies goals for individual progress, accomplishment, or success</li> <li>Identifies strategies that help them to be successful as a learner (e.g., “It helps me stay focused if I clear off my desk.”)</li> <li>Internalizes societal messages related to gender and body image (e.g., girls may internalize a belief that they aren’t good at math or may express a desire to be thinner)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Reflects on and evaluates their own thinking and learning</li> <li>Takes pride in individual accomplishments and respects accomplishment of others (e.g., “Your story was so detailed. I really liked it!”)</li> <li>Plans for learning and physical needs ahead of time (e.g., brings their own stress ball to circle time)</li> <li>Identifies role models who share some of their interests and marginalized group identities</li> </ul>

### Ways the educator might support the child’s development:

- Create time for children to share their work, either before or after a working period; allow children to choose the work they want to share
- Display children’s work with their words of guidance or explanation beside it
- Create structures for children to show their interests and preferences, such as choice time
- Make time for reflective conversations (“How are you doing in our classroom routines? How is reading going?”)
- Avoid asking children to line up or choose partners by gender
- Engage in reflective writing as a routine and at key points, such as after finishing a project or before a conference with families; ask such questions as “What is hard for you in our classroom?” and “How have you been working to improve?”
- Record children telling stories in their home languages, and share those stories with the community
- Invite family members to come to school to be interviewed by the children
- Use books to support direct conversations about questions related to gender stereotypes, and bullying when they arise
  - » *King & King*, by Linda De Haan
  - » *One of a Kind Like Me*, by Laurin Mayeno
  - » *Allie’s Basketball Dream*, by Barbara E. Barber
  - » *The Gender Fairy*, by Jo Hirst.
  - » *Princess Hair*, by Sharee Miller
  - » *My Princess Boy*, by Cheryl Kilodavis
  - » *Amazing Grace*, by Mary Hoffman
- Invite students to plan for and participate in a conference with their families
- Engage in casual conversation with the child about what they like to do outside of school
- Provide time, space, and materials for chosen work and some choice within assigned work
- Support and encourage students to participate in identity-based affinity groups
- Notice and address opinions reflecting societal messages that equate material acquisitions with self-worth

### III. SOCIAL AND EMOTIONAL DEVELOPMENT

# D. Empathy

Child forms deep, caring, human connections by imagining what someone else may be thinking or feeling and responding with care. Child recognizes unfairness and understands that unfairness hurts.



## Over time, and with guidance and encouragement, children develop: **Empathy**

Child forms deep, caring, human connections by imagining what someone else may be thinking or feeling and responding with care. Child recognizes unfairness and understands that unfairness hurts.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Smiles when they see a smiling face, especially a familiar one</li> <li>• Reacts when someone is sad or upset; this reaction may include startling, eye contact, or becoming upset themselves</li> <li>• Observes other’s faces for clues about how they should feel</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Looks to educator to gauge their response to a new person or situation</li> <li>• Pats and strokes others who are distressed</li> <li>• Shows guilt when they harm someone or do something forbidden</li> <li>• Distinguishes between kind and cruel actions</li> <li>• Stays nearby and quietly watches a child who is upset</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses known strategies to try to help other children who are upset or sad (e.g., brings a crying friend to the educator)</li> <li>• Notices and disapproves of unfair (unequal) distribution of desired objects</li> <li>• Attempts to help with a perceived need, (e.g., opens a cabinet for someone whose hands are full)</li> <li>• Wants to see good actions rewarded and bad actions punished</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Understands that people have beliefs that are not true</li> <li>• Understands that just as they have thoughts, feelings, and goals, other people have thoughts, feelings, and goals too</li> <li>• Begins to understand that not everyone likes the same things</li> <li>• Assigns feelings to dolls or toys and cares for them</li> </ul>

### Ways the educator might support the child’s development:

- Show authentic emotional responses to situations
- Respond quickly and lovingly to child
- Notice when children are uncomfortable and provide reassurance
- Name emotions (e.g., happy, sad, mad, scared, excited, etc.)
- Talk to families about how empathy is expressed in their culture and community
- Suggest how children can show empathy; encourage the child to offer a tissue, comfort item, or pat on the back to family members or friends who may be feeling hurt or sad
- Acknowledge acts of kindness (“You helped Frannie find her shoes.”“Thank you! That hug really helped to make Josie feel better.”)
- Model empathy. (“Bill was tired. I could tell because he was crying, so with your help, we went and got his blanket that he sleeps with. This made him feel better, and he has stopped crying.”)
- Provide pets for the children to observe and care for. (“I wonder if our fish is feeling hungry?”)
- Empathize with the child. (“I know it’s hard to wait for a turn.”)
- Rethink the use of “I’m sorry,” as children may not know what this means; instead describe children’s feelings. (“Look at Sheila. She’s sad. She’s crying. She’s holding her arm where you pushed her. Let’s see if she’s ok.”)

## Over time, and with guidance and encouragement, children develop: **Empathy**

Child forms deep, caring, human connections by imagining what someone else may be thinking or feeling and responding with care. Child recognizes unfairness and understands that unfairness hurts.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Tells an adult when another child does something unkind or unfair</li> <li>• Is more likely to help someone who has previously helped someone else and is less likely to help someone who has been unkind to someone else</li> <li>• Adopts a variety of roles and feelings during pretend play</li> <li>• Identifies and responds to the feelings and experiences of the characters in stories</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Expresses how another child might feel (e.g., “I think Tanya is sad because she is crying.”)</li> <li>• Shows concern about fairness within peer group</li> <li>• Develops awareness that some racial, cultural, gender, and linguistic identities are unfairly valued more than others in society</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Begins to recognize how own actions affect others</li> <li>• Listens to viewpoints of others</li> <li>• Offers support to another child or shows concern when a peer is upset (e.g., “I see you’re sad. Do you want to play with me?”)</li> <li>• Develops their own theories about social inequities (e.g., why some groups of people tend to have more money and decision-making power than others)</li> </ul>

### Ways the educator might support the child’s development:

- Validate child’s feelings (“You’re sad. I would feel sad if I lost my teddy bear too.”)
- Read books about feelings and discuss character’s feelings, asking such questions as, “How would you feel if that happened?”
- Demonstrate how to ask for and understand the viewpoints and opinions of others (“Tell me how you feel about that.”)
- Use pretend play to help children develop understanding of others’ feelings. (“The hippo’s mommy is going to work. How does baby hippo feel?”)
- Teach children that feelings change; help them reflect on how they felt earlier in the day and how they feel now
- Assist children in acknowledging and understanding how a peer is feeling by pointing out facial expressions, voice, tone, body language, or words the child is using.
- Use “I” statements to teach children self-awareness (“I don’t like it when you ignore me. It makes me feel sad.”)
- Using an anti-bias approach, introduce critical thinking (true/not true, fair/not fair) about pervasive stereotypes
- Put a seed in a jar every time a child practices an act of kindness and plant a kindness garden when the jar is full
- Acknowledge children’s ability to practice empathy (“I saw how you let Diego have the markers when he was upset. I bet you wanted the markers too, but you chose to help a friend.”)
- Throughout the year, talk to children about past and present injustices and social justice movements
- When children notice injustice in their classroom or community, engage them in group action to try to make things fairer
- Read books about kindness
  - » *The Last Stop on Market Street*, by Matt de la Peña,
  - » *The Lion and the Mouse*, by Jerry Pinkney
  - » *The Big Umbrella*, by Amy June Bates

## Over time, and with guidance and encouragement, children develop: **Empathy**

Child forms deep, caring, human connections by imagining what someone else may be thinking or feeling and responding with care. Child recognizes unfairness and understands that unfairness hurts.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Dislikes being at a relative disadvantage to others (e.g., would rather that nobody got cookies, than that their friend got two and they got one)</li> <li>Does not object to being at a relative advantage to others (e.g., does not advocate for fairness when they get three cookies and their peer gets one)</li> <li>Notices and describes social inequities</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Stands up for others when they encounter unfairness</li> <li>Feels strongly about equality of outcome</li> <li>Understands that people think about what others are thinking or feeling (e.g., says, "He invited her to the party because he didn't want her to feel left out.")</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Uses previous experiences when interpreting another person's feelings (e.g., notices a child playing alone on the playground and invites them to play)</li> <li>Observes and determines reactions of others when responding (e.g., The child remembers that their friend likes to be alone when they are frustrated and waits for them to calm down before approaching)</li> </ul>

### Ways the educator might support the child's development:

- Observe that life seems easier for some people and harder for others, and explore with children the reasons for these inequities; teach that inequities are not a consequence of anything that marginalized people did wrong
- Teach children to show compassion and support for their peers
- Assume children's good intentions
- When children come to educator with an interpersonal conflict, ask them to start resolving it by first trying to imagine and articulate how the other party feels, and then invite them to articulate to each other how they really feel
- Read books about kindness:
  - » *Each Kindness*, by Jacqueline Woodson
  - » *Under the Lemon Moon*, by Edith Hope Fine
  - » *The Quiltmaker's Gift*, by Jeff Brumbeau
  - » *Those Shoes*, by Maribeth Boelts
  - » *One Green Apple*, by Eve Bunting
  - » *The Invisible Boy*, by Trudy Ludwig
- Use empathic group problem solving ("Our friend is having a hard time. Can anyone think of a way to help?")
- Work on perspective-taking in interpersonal interaction ("If she did to you what you did to her, how would you feel? What would you want her to do?")
- Use shared reading to develop perspective-taking, asking, for example, "How would you help this character when they are feeling so worried?"
- Provide opportunities for children to take meaningful action to address social inequity in their community
- Offer children structured contexts in which to identify, practice, and receive empathy
  - » Play a "jump in" theater game in which two characters act out a conflict and anyone is welcome to "jump in" as a third character to offer empathy to either or both parties if they see a way to help resolve the conflict

Photo credit Sarah Ferholt



### III. SOCIAL AND EMOTIONAL DEVELOPMENT

# E. Cooperation and Negotiation

Child navigates friendships with peers through cooperation and negotiation.



## Over time, and with guidance and encouragement, children develop: Cooperation and Negotiation

Child navigates friendships with peers through cooperation and negotiation.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Watches babies and other children and imitates their sounds, actions, and motions</li> <li>• Shows interest and enjoyment in interaction with other children and adults, as expressed in gestures, facial expressions, and vocalizations such as babbling, exclamations, and laughter</li> <li>• Engages in back-and-forth interactions with the educator for short periods of time (e.g., rolling a ball, playing peek-a-boo)</li> <li>• Makes judgments about others by observing their helpful and unhelpful actions</li> <li>• Reaches out to touch other children or the toys they are playing with</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Passes a toy or a ball back and forth with an adult or another child, at least once or twice</li> <li>• Imitates the simple actions of a peer (e.g., banging blocks together)</li> <li>• Helps educator with caregiving tasks (e.g., holds out their foot so their caregiver can put on their shoe)</li> <li>• Indicates preferences and intentions by answering yes/no questions (e.g., child nods head yes and hands a doll to teacher when asked if they are finished playing with it)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Physically removes toys from another child’s grasp that they would like to play with</li> <li>• Refuses to give peer a turn</li> <li>• Accepts adult help to negotiate disputes over toys</li> <li>• Expresses interest in playing with a certain child</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Responds physically when another child takes a toy (e.g., pushing, hitting, or biting)</li> <li>• Recognizes there is conflict and seeks out educator’s assistance</li> <li>• Understands concept of “mine” and is starting to develop the concept of “his/hers/theirs”</li> <li>• Seeks out, initiates, and responds to other children for social interactions for short periods of time</li> <li>• Plays side by side with another child, making comments to them</li> <li>• Participates in loosely structured group games (e.g., chase, dramatic play, or ring-a-round-a-rosie)</li> <li>• Sometimes accepts and imitates other children’s ideas for play with adult prompts as needed (e.g., takes a shovel that is offered and briefly digs in sandbox beside another child)</li> </ul>

### Ways the educator might support the child’s development:

- Take time to be present with babies; acknowledge their effort to connect to you
- Provide time for babies to play near one another
- Notice when the baby is watching other children play with an object; hand the object to the baby, saying, “Would you like to hold this?” or “It’s your turn.”
- Play back-and-forth games; for example, hand an object to a baby, wait for them to grasp it, and then reach out your hand so they may hand it back to you if they like
- Invite the baby to roll a ball to another child who rolls it back
- Provide duplicate or similar toys to avoid conflicts from arising
- Provide simple tasks and toddler-sized materials so that the children may cooperate in caring for their learning environment; for example, offer children small sponges to help clean off the table
- Support children’s curiosity about other children; when a child reaches for another child, model what “gentle touches” mean and practice gentle touches on a stuffed animal
- Respond to conflicts objectively, using simple language to describe the conflict and phrases such as, “We have a problem, so what can we do to solve it?”
- Stay with children until the conflict is resolved
- Notice and verbalize children’s feelings (“I see you really want to play with that toy and it is hard to have to wait for it.”)
- Provide alternate objects and activities while children wait for a turn
- Show respect for the child’s choices and attempts at problem solving (“Hmm, I see you want that toy and you said, ‘Turn please.’ I wonder if we could find another toy to trade with Diana?”)

## Over time, and with guidance and encouragement, children develop: **Cooperation and Negotiation**

Child navigates friendships with peers through cooperation and negotiation.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Negotiates with peers (e.g., takes turns, plans play) and communicates disagreement to other children</li> <li>• Understands the concept of “mine” and “theirs”</li> <li>• Chases other children and then turns and allows themselves to be chased</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Assigns roles in play</li> <li>• Uses different turn-taking strategies (e.g., bartering, trading, or waiting for a turn)</li> <li>• Uses simple strategies to solve problems, either individually or in a group</li> <li>• Negotiates with other children to solve a problem</li> <li>• States a position with reasons. (e.g., “I don’t want to play blocks right now because I want to draw.”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Shares, take turns, and cooperates in a group</li> <li>• Listens to others’ ideas and wants; shares own ideas and wants</li> <li>• Understands that sometimes you are a leader, and sometimes you are a follower</li> <li>• Plays simple card games that require turn-taking and waiting</li> </ul>

### Ways the educator might support the child’s development:

- Ensure that there are enough materials for each child to have a reasonable amount
- Observe, record, and reflect on the efforts of emergent multilingual learners to connect with their peers; intentionally create opportunities to extend these connections
- Make adaptations so that all children can be involved in a meaningful way in individual and group activities
- Create puppet shows in which conflicts between children are dramatized; allow children to identify how to solve the conflict
- Use naturally occurring problems as an example to practice problem-solving skills (“Uh-oh, we have only one of those trucks and I see that Juan is mad that Devonte grabbed it from him. What can we do to help Juan not feel mad?”)
- Provide activities that are done in pairs (e.g., “marbles in box” painting, which requires two children to hold and tilt the corners of the box)
- Include books about friendship in the learning environment, such as
  - » *Making Friends*, by Fred Rogers
  - » *Amos and Boris*, by William Steig
  - » *Alexander and the Wind-up Mouse*, by Leo Lionni
- If possible, create opportunities for emergent multilingual children who share the same home language to sit and play together
- Use conflict-resolution strategies such as a problem-solving script
  1. “I don’t like it when…”
  2. “What can I do to make you feel better?”
  3. “You can …”
- Use visual aids to illustrate strategies for problem-solving; for example, allow children to select a picture that depicts how they feel and what will make them feel better
- Provide opportunities for the child to experience the reactions of their peers by not rushing in too quickly to resolve conflicts
- Reflect with families about how they feel children should act toward their friends and siblings
- Consider peer placement during classroom activities; notice children who have been connecting with one another and place them together
- Read books about cooperation and negotiation
  - » *Swimmy*, by Leo Lionni
  - » *Seven Blind Mice*, by Ed Young
  - » *Anansi the Spider*, by Gerald McDermott
- Encourage peer partnerships, such as play partners or clean-up buddies
- Tell the folk story of stone soup and make stone soup together as a class; discuss the value of working together
- Include child-directed activities in the daily schedule in order to give children the opportunity to learn to cooperate and negotiate

## Over time, and with guidance and encouragement, children develop: **Cooperation and Negotiation**

Child navigates friendships with peers through cooperation and negotiation.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Negotiates with other children by using words to express ideas and feelings</li> <li>• Plays games that have clear roles for two players (e.g., card games, board games, and computer games)</li> <li>• May change the rules of structured games to ensure that they win</li> <li>• Dislikes being corrected or losing at games</li> <li>• Identifies actions of others as purposeful or accidental</li> <li>• Sense of friendship with the same child may change abruptly within the same day</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Is concerned about having friends and being liked</li> <li>• Engages in competitive games with peers</li> <li>• Works cooperatively on a group project (e.g., a mural or group collage)</li> <li>• Lets others join a game that is already in progress (e.g., “We just started playing but you can join us and go after Alex.”)</li> <li>• Listens to others’ points of views and considers ways to compromise</li> <li>• Identifies strategies to successfully resolve conflicts (e.g., “Let’s read the rules so we all agree on how to play.”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Values group membership and peer acceptance</li> <li>• Understands that friendships can remain even when disagreements occur</li> <li>• Balances needs and rights of others and their role in group work</li> <li>• Contemplates other viewpoints when resolving conflict</li> <li>• Independently follows the rules of a game to ensure fair play</li> </ul>

### Ways the educator might support the child’s development:

- Consider shared interest among children as basis for connection; children who like to build, children who like to read about animals, etc.
- Suggest out-of-school time connections for families
- Offer shared language for respectful conversation, including respectful disagreeing: (“I disagree” rather than “No! You’re wrong!”)
- Read books about cooperation and negotiation, such as
  - » *Click, Clack, Moo: Cows That Type*, by Doreen Cronin
  - » *Cat and Rat*, by Ed Young
  - » *The Three Little Wolves and the Big Bad Pig*, by Eugene Trivizas
- Offer a variety of games
  - » Chutes and Ladders
  - » Go Fish, Uno, or other card games
  - » Jenga
  - » Connect Four
  - » Checkers
- Foster friendships; allow children to choose their own work partners at times
- Support children’s desire to spend time with peers who affirm their developing social, linguistic, and cultural identities
- Help children generate nonviolent, assertive language to communicate; be a supportive witness as children practice these skills
- When guiding children through conflict resolution, be alert to family and cultural differences in how people handle and navigate conflict
- Foster social connections among family members; ask families about times and kinds of events that would work best for them
- Notice children who may be left out and give them special jobs to do with a friendly peer; provide time to openly discuss feelings related to peer group inclusion and exclusion
- Discuss books about conflict and negotiation, asking children to name the point of conflict, feelings of each protagonist, and effective and ineffective behaviors that each character engaged in
- Offer “counselor,” a role that helps children resolve conflicts, as a classroom job

### III. SOCIAL AND EMOTIONAL DEVELOPMENT

# F. Emotional Self-Regulation

Child expresses and manages their feelings and impulses.



*Photo credit: Shannon Taggart*

## Over time, and with guidance and encouragement, children develop: Emotional Self-Regulation

Child expresses and manages their feelings and impulses.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Signals needs with sounds or motions (e.g., turns head and roots or cries when hungry, or reaches for wanted object of comfort)</li> <li>• Relaxes or stops crying when comforted, especially by familiar adult (e.g., when swaddled or spoken to softly)</li> <li>• Responds to emotional cues and social situations (e.g., crying when other babies cry)</li> <li>• Smiles, waves, or laughs in response to positive adult interaction</li> <li>• Comforts self by clutching, sucking, or stroking when tired or stressed (e.g., calms while stroking or holding soft blanket)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Seeks educator support and attention when encountering a challenge</li> <li>• Imitates adults’ facial expressions and moods</li> <li>• Uses physical contact to express emotions (e.g., kissing, biting, hugging, or patting)</li> <li>• Rubs comfort object or sucks thumb when upset or tired</li> <li>• Repeats sounds or words to draw educator’s attention to their needs and begins to cry if educator does not respond quickly enough</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses a variety of strategies to manage their feelings, such as withdrawing from the group, seeking a hug from the educator, or holding on to a special object</li> <li>• Tells educator “I’m ok!” after they fall down</li> <li>• Says phrases like “Mommy bye-bye” and points to the door to communicate that they miss their family</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Continues to do an action, such as climbing over the top of a table, after an educator has asked them to stop</li> <li>• Protests loudly, and may have tantrums, in response to limits</li> <li>• Names some emotions (e.g., happy, sad, excited, mad, tired, or scared)</li> <li>• Begins to use pretend play to express/act out emotions</li> </ul>

### Ways the educator might support the child’s development:

- Engage in self-care so that your own feelings and moods are well-regulated
  - » Sleep well
  - » Eat regularly
  - » Take breaks
  - » Reflect on the joys and challenges of educating young children with trusted friends and colleagues
  - » Make a list of positive supports in your own life
- Comfort a child whenever they cry
- Respond to baby’s cues and vocalizations by expressing concern about their feelings and then confidence in being able to meet their needs (“You are crying so hard. I am coming. I will hold you. You are letting me know that you need a bottle.”)
- Ask families what helps their child to feel better when they are upset
- Respond to child’s displays of pleasure by matching child’s emotions with facial expressions, tone, and words
- Model facial expressions to express emotions and label emotion (e.g., happy face-smile, sad face-frown, or angry face-scowl)
- Identify which behaviors are upsetting for you, and develop a new response to those behaviors (e.g., “When children hurt each other, I used to yell at them to stop. Now, I teach them about “gentle touches,” and when they are rough, I say, “Remember, gentle touches.”)
- Set clear and consistent limits in a loving way
- Include soft items in the caregiving environment that the child can snuggle with
- Allow the child to freely experience and feel their emotions in safe ways; label all feelings, especially intense ones, so that the child starts to connect the feeling with the word
- Name your own genuine feelings as they arise. (“I feel so happy to be with you today.”)
- Create a balance between quiet and louder activities in the learning environment and throughout the day
- Invite the family to provide a comfort object from home, such as a blanket or a stuffed animal that a child may use to calm down
- Use words to teach children to associate feelings with proper names (e.g., “She’s smiling. Do you think she’s happy, excited, or silly?”)
- Talk with children about the feelings characters are having in books
- Support the child by reflecting back their responses and reactions (“I see you. You are hitting and kicking. I am here to help you.”)
- Stay with children while they are having strong feelings, and let them know they are safe
- Notice and acknowledge the child’s preferred strategies for managing their feelings

## Over time, and with guidance and encouragement, children develop: **Emotional Self-Regulation**

Child expresses and manages their feelings and impulses.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Expresses strong feelings physically (e.g., kicks, hits, or throws items)</li> <li>• May feel overwhelmed by emotions such as excitement or disappointment</li> <li>• Talks to an imaginary friend about their thoughts and feelings</li> <li>• Assigns certain inanimate objects their own feelings (e.g., the stuffed dog is said to be mad because it can't have a cookie before bed)</li> <li>• Talks about their emotions when someone notices they are sad and asks them about it</li> <li>• Asks "why" questions to show effort at understanding effects of behavior</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Tries to express strong feelings verbally, but then may resort to physical expression (e.g., breaking toys)</li> <li>• Acts out and resolves emotions in dramatic play</li> <li>• Explains the reason behind their emotions</li> <li>• Uses vocabulary for complex emotions, such as disappointed, frustrated, embarrassed, or thrilled</li> <li>• Advocates for what they want and what they like</li> <li>• Identifies some things that help them feel better when they are upset</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Often expresses strong feelings in socially and culturally accepted ways</li> <li>• Identifies emotions and uses words to describe them</li> <li>• Describes why people may feel differently about the same situation</li> <li>• Intentionally uses humor (e.g., begins to tell jokes)</li> <li>• Begins to understand and explain reactions to certain circumstances</li> </ul>

### Ways the educator might support the child's development:

- Talk to families about how emotions are expressed in their family, community, and culture
- Reflect on personal beliefs regarding the acceptability and unacceptability of specific types of child behavior
- Create a cozy area with books, pillows, soft fabrics, and a variety of objects they can pull or squeeze
- Use self-talk to label own emotions and coping strategies (e.g., "I am feeling frustrated, so I am taking a deep breath to calm down.")
- Incorporate books on feelings reflective of the language and cultural background of the children
- Reflect with colleagues to determine what message children's feelings, behaviors, and impulses are conveying
- Wait until you are calm before talking to a child about a moment in which they had strong feelings
- When you and the child are both calm, talk to the child about what happened (e.g., "Earlier you cried when Ellen took the toy from you. How do you think you were feeling? What could you have said to tell Ellen how you felt?")
- Teach children coping strategies for self-regulating/or self-monitoring behaviors
- Avoid stereotyping children's expression of emotion (e.g., validate boys when they cry, and girls when they get angry)
- Talk to families and colleagues about their expectations for children's behavior; acknowledge contrasting or conflicting beliefs
- Try multiple strategies consistently to prevent child(ren)'s adverse feelings and impulses
- Verbally reinforce children's attempts at self-control (e.g., "I see that you are mad. I am happy to see you take some deep breaths.")
- Avoid removing the child from an activity or from the classroom as a consequence

## Over time, and with guidance and encouragement, children develop: **Emotional Self-Regulation**

Child expresses and manages their feelings and impulses.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Identifies socially and culturally acceptable behavior (e.g., listening vs. interrupting)</li> <li>• Becomes upset when they lose a game but is able to use a strategy to cope</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Demonstrates flexibility and socially appropriate behavior at school (e.g., “When we are in the hallway we keep our voices down so other classes can work.”)</li> <li>• Manages strong emotions using known strategies (e.g., talks to a friend about being reprimanded by the educator)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Demonstrates patience with personal circumstances (e.g., When doing math says, “I need to add slowly when working with big numbers so I don’t make a mistake and get frustrated.”)</li> <li>• Identifies their strengths and challenges</li> </ul>

### Ways the educator might support the child’s development:

- Read books about self-control, such as:
  - » *Sophie Gets Angry, Really, Really Angry*, by Molly Bang
  - » *Ahn’s Anger*, by Gail Silver
  - » *Lily’s Purple Plastic Purse*, by Kevin Henkes
- Discuss the books with the children, asking
  - » Have you ever felt the same way as \_\_\_?
  - » What would you do if you were \_\_\_?
  - » What would you say to \_\_\_?
- Create strategy charts for feelings, impulses, and ways to act on them
- Talk to families and past teachers about the development of the child’s ability to self-regulate
- Notice, recognize, and communicate when children take hard steps to achieve control (e.g., “I saw that you left the game when you were getting upset.”)
- Sing songs like “I Get Up In The Morning,” which contains the refrain, “Everything’s going to be all right,” to remind children that strong feelings pass; try “Here Comes the Sun,” to recall that feelings change
- Reflect with families and colleagues about the way strong feelings are expressed in the communities and cultures of the children in your class
- Encourage the development of children’s self-awareness by suggesting that they write about their personal strengths and challenges
- Let children know which trusted adults are available to be with them when they have strong feelings

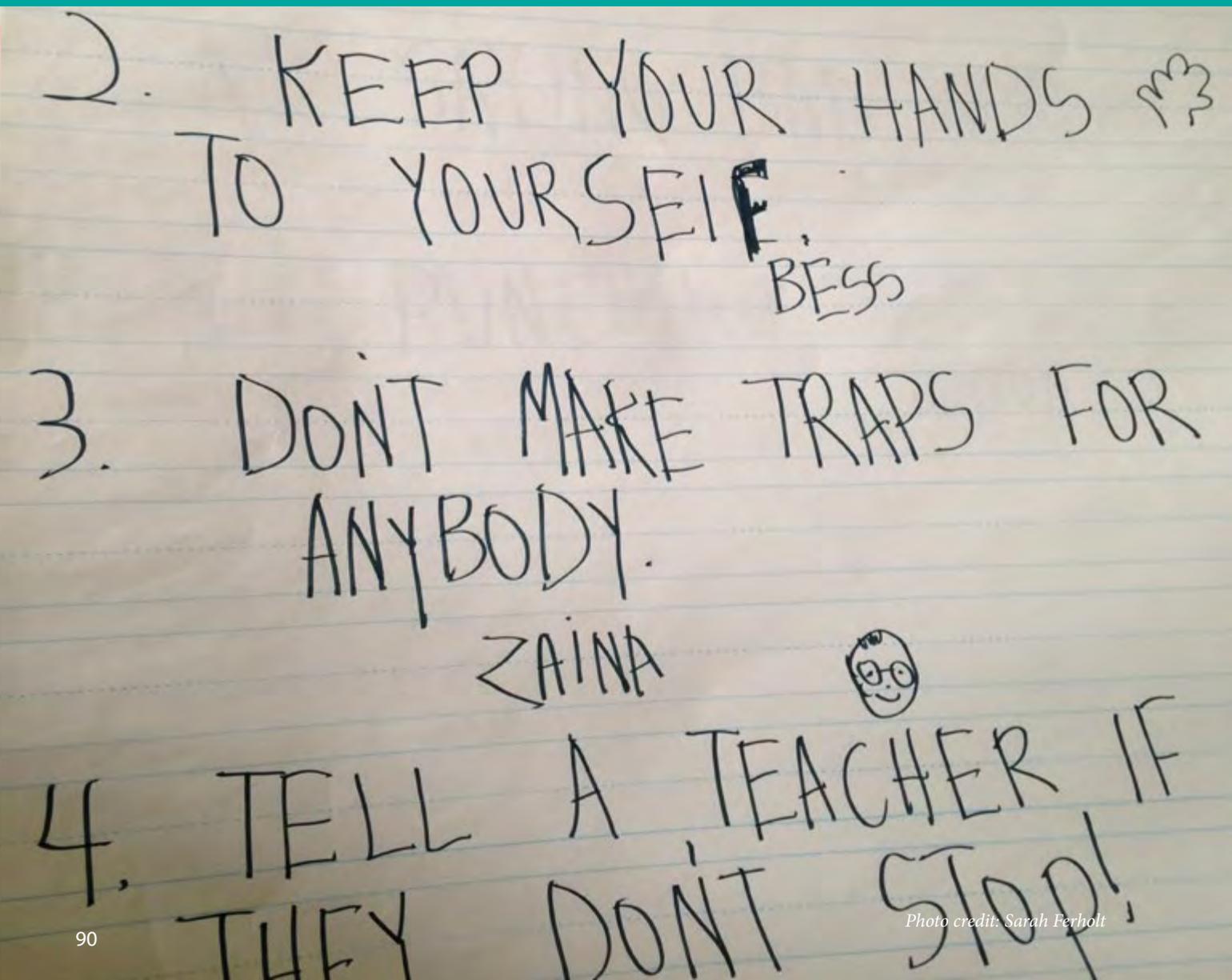


Photo credit: Sarah Ferholt

### III. SOCIAL AND EMOTIONAL DEVELOPMENT

# G. Following rhythms, rules and routines

Child follows the rhythms, rules, and routines of the learning environment.



## Over time, and with guidance and encouragement, children develop: Rhythms, Rules and Routines

Child follows the rhythms, rules, and routines of the learning environment.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Develops increasing consistency in sleeping, waking, and eating patterns</li> <li>• Anticipates and participates in routine interactions (e.g., lifts arms toward educator to be picked up)</li> <li>• Engages in some regular behaviors (e.g., sings or babbles self to sleep; goes to high chair when hungry)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Recognizes that certain adult actions are associated with expected behavior (e.g., waits to be buckled into stroller)</li> <li>• Anticipates familiar routines or activities (e.g., watches for a family member when it is time to go home)</li> <li>• Recognizes that different behaviors will elicit different reactions from adults</li> <li>• Makes eye contact with educator when doing something that is off-limits</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Begins to assert self by resisting educator requests</li> <li>• Reaches to take a toy from a peer, but then pulls back their hand in response to the educator’s look</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Follows some consistently set rules and routines (e.g., chooses a book after lunch for quiet time)</li> <li>• Challenges boundaries and rules while striving for independence</li> <li>• Experiences difficulty transitioning from one activity to the next</li> <li>• Can verbally start to tell what comes next in the routines, and helps guide others in different transitions and activities</li> </ul>

### Ways the educator might support the child’s development:

- Develop an individualized routine that is predictable and consistent so that the child learns that their needs will be met; not every child will be on the same schedule
- Assign primary caregiving groups so that an educator does most of the important daily tasks such as transitions, diapering, feeding, and providing comfort
- Respond to child’s cues as soon as possible, and verbally let the child know that you are acknowledging their feelings
- Use words to express what the child is requesting (e.g., “You are starting to rub your eyes, so it looks like you are getting sleepy.”)
- Offer individualized schedules for those children who may need to nap longer or eat earlier than the rest of the group
- Have a consistent routine throughout the day, and prompt child with verbal cues about what may come next. (e.g., “We’re going to change your diaper and then give you a bottle.”)
- Use a positive approach with children; tell the child what they *can* do, rather than what they can’t do
- Provide appropriate alternatives and substitutes (e.g., “I see you want the baby doll. Can you hold the puppy while you’re waiting?” or “Chairs are for sitting. You can climb on the climber.”)
- Use familiar cues such as dimming of lights, playing music, singing a song, or displaying a picture to indicate a transition
- When giving a child directions
  - » First gain the child’s attention
  - » Use simple language
  - » Give one direction at a time
  - » Use positive language (e.g., “Gentle hands,” rather than “Don’t hit.”)
  - » Give time for children to respond to direction
  - » Follow through with positive acknowledgement
- Meet with families to discuss the rules in their home. Identify which of these rules families consider cultural values; establish rules in the classroom that provide continuity with the children’s experience at home
- Agree on a simple set of rules with your team of educators
- Provide time for children to learn and practice rules
- Create a picture schedule and post at the children’s level to help children anticipate transitions; review the picture schedule at the start of the day
- Encourage children to feel ownership of the learning environment; for example, provide access to a small sponge so they can wipe up their own spills

## Over time, and with guidance and encouragement, children develop: **Following rhythms, rules and routines**

Child follows the rhythms, rules, and routines of the learning environment.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Participates in routine activities such as meal time, snack time, and nap time</li> <li>• Follows simple rules with few reminders (e.g., handles toys with care, clears plate after lunch, cleans up before moving to another center)</li> <li>• Begins to follow basic safety guidelines and requirements, such as walking rather than running inside, but may not do so consistently</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Adapts to changes in daily schedule (e.g., “Today is Wednesday, and we have our art lesson with our visiting artist.”)</li> <li>• Predicts what comes next in the day, when there is an established and consistent routine (e.g., “After nap we have a snack, then my Mom comes to get me.”)</li> <li>• Demonstrates understanding of the consequences of own actions on others (e.g., “I gave Anna the toy and so she feels better.”)</li> <li>• Waits for turn during group activities</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Changes actions to meet expectations of different settings (e.g., takes off shoes at home but wears shoes at school)</li> <li>• Applies familiar rules in new but similar situations (e.g., uses a quiet voice inside)</li> <li>• Adapts to new environment by behaving and displaying emotions in expected ways (e.g., goes to a new friend’s house and is able to be calm, share, and take turns)</li> </ul>

### Ways the educator might support the child’s development:

- Talk with families about their beliefs regarding discipline and how they would like their child to relate to authority figures
- Design the schedule to include a balance of large and small group activities, and active and quiet times
- Design the schedule to minimize the number of transitions in the day and the amount of waiting during transitions; this may involve breaking up the classroom into smaller groups
- Recognize there are individual variations in what forms of acknowledgement are interpreted as positive by children and choose the best fit for each child (e.g., verbal, physical, non-verbal, etc.)
- Provide frequent, clear, and consistent verbal and non-verbal positive feedback
- Implement the schedule consistently
- Teach children about the schedule and encourage them to verbally express what comes next
- Teach children the expectations for transition times
- Provide clear verbal and visual warnings prior to transitions
- Follow through with positive acknowledgement of children’s behavior and following of rules
- Provide gentle reminders about rules of different areas, such as the playground and the classroom
- Establish, explain, and model simple rules in ways children can understand (e.g., nap time might involve going to the bathroom, seeing the lights go off, getting into bed, and hearing calming music)
- Create rules that are manageable (3–5 classroom rules around safety, for example), ask for children’s input about the rules, and discuss what makes a strong rule
- Review the rules and classroom expectations regularly, at a time when things are calm
- Post rules in words and pictures
- Enforce rules and consequences consistently and fairly for all children
- Reflect about which children are most commonly disciplined in the learning environment; do these children belong to marginalized groups?
- Reflect with families and colleagues about how children may perceive the educator’s attempts to provide direction (e.g., Educator says, “Would you return to your seat?” and child perceives it as a question rather than a request)

## Over time, and with guidance and encouragement, children develop: **Following rhythms, rules and routines**

Child follows the rhythms, rules, and routines of the learning environment.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Adheres strongly to rules (e.g., “James isn’t raising his hand to talk, but I am!”)</li> <li>Follows routines with multiple steps independently (e.g., arrives in the morning and knows what to do to begin day: hangs up belongings, takes out their folders, and chooses an activity until group time is announced)</li> <li>Takes turns in group discussion (e.g., raises hands, quietly listens to others, and proposes ideas when it’s their turn to talk)</li> <li>Adapts rules to fit a particular situation or their own desires</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Knows the daily and weekly schedule and routines and follows routines accordingly (e.g., time for art, physical education, recess, lunch, etc.)</li> <li>Adapts to the majority of a group even when the group’s ideas differ from their own (e.g., group plays a game with rules different from the actual rules)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Understands and follows large concepts or rules regarding safety, kindness, respect, and care within different environments</li> <li>Understands the purpose of laws</li> <li>Follows rules alone or within a group (e.g., quietly enters or exits building, gym, or library alone or in a group)</li> </ul>

### Ways the educator might support the child’s development:

- Reflect on your own cultural expectations related to discipline
- Create some routines together; ask children, for example, how they think an area could best be organized and use their input to create some routine procedures
- Decide on logical consequences for rules with all staff; reconsider the use of social exclusion as a consequence
- Learn from families about rules and routines they have at home
- Create illustrated charts of complex routines, like cleaning up paint or packing up at dismissal
- Sing songs or chants to remind children of steps in a routine
- Engage children in reflecting on the origins and intentions of social laws
- Engage children in conversation about social movements to make society more fair
- Invite children to discuss the difference in rules between various cultures, communities, and families



# Social and Emotional Development References

- Amini Virmani, E., & Mangione, P. L. (Eds.). (2013). *Infant/toddler caregiving: A guide to culturally sensitive care* (2nd Ed.). Sacramento, CA: California Department of Education and WestEd.
- Bloom, P. (2013). *Just babies: The origins of good and evil*. New York, NY: Crown Publishers.
- Burt, T., Gelnaw, A., & Klinger Lesser, L. (2010, January). *Creating welcome and inclusive environments for lesbian, gay, bisexual and transgender (LGBT) families in early childhood settings*. Reprinted from *Young Children*.
- California Department of Education. (2008). *California preschool learning foundations*. Sacramento, CA: Author. Retrieved from <http://www.cde.ca.gov/sp/cd/re/documents/preschoollf.pdf>.
- California Department of Education. (2009). *California infant/toddler learning & development foundations*. Sacramento, CA: Author. Retrieved from <http://www.cde.ca.gov/sp/cd/re/documents/itfoundations2009.pdf>.
- Center on the Social and Emotional Foundations of Learning. (2006). *Inventory of practices for developing social and emotional competence*. Vanderbilt University.
- Cheruvu, Ranita. (2019). Supporting children's understanding about diversity. In J. Strasser & L. Bresson, (Eds.), *Big questions for young minds: extending children's thinking*. New York, NY: NAEYC.
- Colorado early learning and development guidelines. (n.d.). Retrieved from [https://earlylearningco.org/pdf/ELD\\_Guidelines\\_English.pdf](https://earlylearningco.org/pdf/ELD_Guidelines_English.pdf).
- Dombro, A. L., Jewkes, A.M., Marsden, D.B., Meisels, S.J., & Weston, D.B. (2003). *The ounce scale: standards for the developmental profiles (birth–42 months)*. New York, NY: Pearson Early Learning.
- Derman-Sparks, L., & Edwards, J. O. (2013). *Anti-bias education for young children and ourselves*. New York, NY: NAEYC.
- Derman-Sparks, L. (2012). Stages in Children's Development of Racial and Cultural Identities and Attitudes. For Sophia Lyon Fahs Lecture. Retrieved from [https://www.uua.org/sites/live-new.uua.org/files/documents/derman-sparkslouise/1206\\_233\\_identity\\_stages.pdf](https://www.uua.org/sites/live-new.uua.org/files/documents/derman-sparkslouise/1206_233_identity_stages.pdf).
- Derman-Sparks, L., & Ramsey, P. (2011). *What if all the kids are white?: Anti-bias multicultural education with young children and families*. New York, NY: Teachers College Press.
- Gelnaw, A. (2005, May/June). Belonging: including children of gay and lesbian parents—and all children—in your program. *Exchange*, 42–45.
- Gilliam, W. S., Maupin, A.N., Reyes, C. R., Accavitti, M., & Shic, F. (2016). *Do early educators' implicit biases relate to behavior expectations and recommendations of preschool expulsions and suspensions?* New Haven, CT: Yale Child Study Center.
- González, N., Moll, L. C., & Amanti, C. (Eds.). 2005. *Funds of knowledge: Theorizing practices in households, communities, and classrooms*. Mahwah, NJ: Erlbaum.
- High Scope Educational Research Foundation. (n.d.). *Preschool child observation record*. Ypsilanti, MI: Author.
- Irving Harris Foundation Professional Development Network. (2012, updated 2018). *Diversity-informed tenets for work with infants, children, and families*. Chicago, IL: Irving Harris Foundation. Retrieved from <https://imhdivtenets.org/tenets/>.
- Kissinger, K. (2017). *Anti-bias education in the early childhood classroom*. New York, NY: Routledge.
- LeeKennon, D. (2017, November 14). *What is identity development?* Retrieved from Anti-Bias Leaders in Early Childhood Education: <https://blog.peps.org/2017/11/14/what-is-identity-development/>.
- Lerner, C. P. (2016, February 1). *How to help your child develop empathy*. Retrieved from <https://www.zerotothree.org/resources/5-how-to-help-your-child-develop-empathy>.
- Marotz, L., & Allen, E. K. (2015). *Developmental profiles: Pre-birth through adolescence*. (8th Ed.) Boston, MA: Cengage Learning.
- National Academies of Sciences, Engineering, and Medicine. (2018). *How people learn II: Learners, contexts, and cultures*. Washington, DC: National Academies Press.
- New York State Education Department. (2019, April 17). *New York State social and emotional learning benchmarks*. Retrieved from <http://www.p12.nysed.gov/sss/documents/NYSSELBenchmarks.pdf>.
- Nicholson, J., et al. (2019). *Supporting gender diversity in early childhood classrooms: A practical guide*. London, England: Jessica Kingsley Publishers.
- Office of Head Start. (2015). *Head Start early learning outcome framework*. Washington, DC: U.S. Department of Health and Human Services.
- Office of Head Start. (2018). *Revisiting and updating the multicultural principles for Head Start programs serving children ages birth to five*. Retrieved from <https://eclkc.ohs.acf.hhs.gov/culture-language/article/multicultural-principles-early-childhood-leaders>.
- Picower, B. (2012). *Using their words: Six elements of social justice curriculum design for the elementary classroom*. *International Journal of Multicultural Education*, 14(1).
- Tatum, B. Daniel (2003). *Why are all the black kids sitting together in the cafeteria: And other conversations about race*. New York, NY: Basic Books.
- Teaching Tolerance. (2016). *Social justice standards: The teaching tolerance anti-bias framework*. Montgomery, AL: Southern Poverty Law Center. Retrieved from [www.tolerance.org/sites/default/files/2017-06/TT\\_Social\\_Justice\\_Standards\\_0.pdf](http://www.tolerance.org/sites/default/files/2017-06/TT_Social_Justice_Standards_0.pdf).
- University of Pittsburgh School of Education Race and Early Childhood Collaborative. (2016). *Positive racial identity development in early education: Understanding PRIDE in Pittsburgh*. Pittsburgh, PA: University of Pittsburgh Press.
- Washington State Department of Early Learning. (2012). *Washington State early learning and development guidelines: Birth through 3rd grade*. Olympia, WA: Author. Retrieved from [www.del.wa.gov/development/benchmarks/Default.aspx](http://www.del.wa.gov/development/benchmarks/Default.aspx).
- Winkler, E. N. (2009). *Children are NOT colorblind: How young children learn race*. Charlotte, NC: HighReach Learning.
- Wood, C. (2018). *Yardsticks: Child and adolescent development 4–14*. (4th Ed.). Turners Falls, MA: Center for Responsive Schools.
- Zero to Three. (2015). *Critical competencies for infant-toddler educators*. Washington, DC: Author. Retrieved from [www.zerotothree.org/resources/1197-zero-to-three-critical-competencies-for-infant-toddler-educators-related-professional-criteria#downloads](http://www.zerotothree.org/resources/1197-zero-to-three-critical-competencies-for-infant-toddler-educators-related-professional-criteria#downloads).

# IV. Communication, Language, and Literacy

- A. Speaking
- B. Listening and Understanding
- C. Social Communication
- D. Engagement with Stories and Books
- E. Phonological Awareness
- F. Composing
- G. Creating and Interpreting Multimedia Texts

# Communication, Language and Literacy

Language development begins before birth. The infant becomes attuned to the sounds of their families' voices when they are in the womb. After they are born, babies make sounds, gestures and expressions, and a trusted adult interprets them, providing love and care. Babies gradually learn that their sounds, gestures, and expressions have meaning, and they begin to use them more intentionally.

Babies notice everything that their trusted adult does; their brains are designed for imitation. They begin to associate the trusted adult's sounds, gestures, and expressions with specific experiences. Soon they begin to pass sounds, gestures, or expressions back and forth with the trusted adult. The trusted adult blows a kiss, and the baby blows a kiss. The baby says, "Ba-ba-ba!" and the trusted adult says, "Ba-da-ba-da!" This is called a serve-and-return interaction.

Serve-and-return interactions, in which the baby and the trusted adult are completely focused on one another and passing language back and forth, are critical for children's development. It is through these interactions that children learn vocabulary, sentence structure, and social skills. The ways in which people interact vary from culture to culture, and these early interactions teach children how to communicate socially in their communities.

Many children have families who speak a language other than English or speak another variation of English. For these children, it is helpful if there is at least one adult in the learning environment who speaks the same language or language variation as their families. If this is not possible, educators are encouraged to recognize that the child's potential to become a multilingual student is a gift. They can encourage the family to nurture their child's home language and include books and print in the learning environment that reflect that language. Children with strong foundations in their home language are more successful English-language users later in childhood.

Learning environments in early childhood should be full of children's voices. One of the most important ways young children develop language is through dramatic play. Make-believe play gives children the opportunity to experiment with questioning, responding, negotiating, and listening. In playful interactions, children construct and rehearse storylines that reflect

the stories that are important in their own lives. These stories will often transfer to paper and pencil as the child describes their narrative using scribbles, pictures, and/or words.

One of the most important ways that educators can support children's language development is to read to them. The educator may welcome the child to sit on their lap or gather them in a small group to read and look at a wide variety of picture books together. Noticing and extending children's engagement by stopping to discuss pictures, characters, or events can inspire a lifelong love of reading and further a child's learning.

The way children learn to write is similar to the way they learn to talk. They make marks, and gradually those marks come to resemble objects in the environment — a face, a house, a flower. They notice the marks that the educator makes and imitate those marks, beginning to form rough letter shapes. They start to recognize that the letters can make up words, such as their name. They learn the sounds that the letters represent and begin to use the letters intentionally to spell things. Their initial spellings are phonetic; they might use just the first and the last sound in the word, such as "pk" for "park." Over time, children learn more standard spelling patterns and use writing to communicate in more sophisticated ways.

## Background Knowledge

Throughout early childhood, children develop background knowledge that will be essential to their success in school. Background knowledge refers to related knowledge about a specific topic or approach to learning that children store in their memories. Background knowledge could include information about themselves, other people, objects, and the world around them, as well as the beliefs, values, rules, and expectations in children's cultures, environments, and languages. Children may develop background knowledge in their home language and transfer it to another language later. As they learn and grow, children build on their background knowledge.

For example, if a child developed strong background knowledge about bears, they might know the names of several kinds of bears, that bears hibernate in the winter, and that polar bears are threatened by global warming. As a result of their background knowledge about bears,

they might also know the names of other animals that hibernate and some facts about climate change. In the process of learning about bears, they might have learned how to use the library and the difference between fiction and non-fiction books.

Background knowledge is essential for reading comprehension. It helps children to figure out what a story or informational text is about. For example, a child might draw on their background knowledge to comment during story time, “I know what is going to happen next! The bear is going to come out of the cave and look for grubs and berries!” In this example, the child is drawing on their background knowledge on bears, as well as on their background knowledge about how to engage in conversations about books and stories.

Background knowledge also fuels children’s engagement as independent learners in play-based learning environments. It helps children engage in language-based imaginative play with their peers. For example, if one child says, “We’re bears! Let’s hibernate,” a child with strong background knowledge will get a sheet to build a cave in which to hibernate. In this example, the child is drawing on their background knowledge about bears and their background knowledge about how to play-act with peers.

All children come to school with “funds of knowledge”—background knowledge that they have learned from their families. Children often have knowledge related to their families’ everyday practices and skills gained from employment, hobbies, traditions, languages, and/or travel. It is important for educators to find out what children have learned from their families so that they can intentionally extend children’s learning.

Educators build on children’s funds of knowledge by linking their plans to topical knowledge and approaches to learning children have gained from their families. For example, a child of migrant workers employed in the dairy industry might know the names of the equipment in the milking parlor. An educator might respond by including informational texts about engineering in the book area or inviting them to tinker with pipes in the water table. Educators might intentionally acknowledge the importance of families’ work in the dairy industry when cooking recipes that include milk.

Educators may find effective ways of engaging families in their community in the life of the program so that they can learn about their funds of knowledge. A form

that educators can use to interview families about their background knowledge is available in the appendix.

It is also important for educators to be aware of the kinds of background knowledge children will later need to engage in social studies and science learning. Intentionally connecting children’s funds of knowledge to academic language will provide them with a strong foundation for school success.

1. Physical Science — Children build background knowledge about physical science when they experiment with solids and liquids, pushes and pulls, sounds and vibration. For example, an educator may discuss the transformation of a liquid batter to a solid bread when baking a snack.
2. Natural Science— Children build background knowledge about natural science when they observe and care for plants and animals. Gardening with young children provides a rich array of opportunities to develop knowledge of the scientific process.
3. Earth and Space — Children build background knowledge about Earth and space when they observe the movement of the sun and changes in the weather. Educators can introduce vocabulary such as “rotation” when children spin around in circles, and “revolution” when they run around in circles.
4. Family and Community — Each child arrives in school with a wealth of knowledge and experience to share. Children build background knowledge about family and community when educators welcome the language and cultures of all the families in the class into the classroom.
5. Geography, Humans, and the Environment — Children build background knowledge about geography, humans, and the environment when they engage in caring for their learning environment. Educators can connect the daily choices children make about materials to broader conversations about sustainability.

## IV. COMMUNICATION, LANGUAGE, AND LITERACY

# A. Speaking

Child will develop the ability to speak and/ or sign in increasingly complete, complex, precise, and varied ways.



## Over time, and with guidance and encouragement, children become increasingly capable of: **Speaking**

Child will develop the ability to speak and/ or sign in increasingly complete, complex, precise, and varied ways.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Sucks on fingers or pacifiers and moves head and mouth towards milk</li> <li>• Laughs and chuckles</li> <li>• Cries when hungry, upset, or in need of attention</li> <li>• May repeat cooing sounds, such as “ooh” and “ah”</li> <li>• Watches caregiver’s mouth closely as they are talking</li> <li>• May sign “milk” by hand gesture approximating the opening and closing hand</li> <li>• Babbles and may make “p,” “b,” and “m” sounds that can begin to seem like “papa,” “baba,” or “mama”</li> <li>• Holds up arms to be lifted up or for a hug</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses facial gestures to engage with adult, such as blinking eyes or sticking out tongue</li> <li>• Makes physical contact to get educator’s attention, including holding educator’s face in their hands or patting educator’s leg until attention is given</li> <li>• Uses utterances consistently to refer to people or favorite objects (e.g., “Mama” for mother, “Dada” for father, and “Ba-ba” for blanket)</li> <li>• Uses a few words to express needs and wants that are understood in context by adults in the child’s environment (e.g., saying “up” to indicate desire to be held)</li> </ul> <p>Note: Expressive language development may pause as a child learns to walk and increase their mobility</p>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Points to items that they want or want the caregiver to give attention to</li> <li>• Uses two words together to express wants, needs, or ideas, such as “Papi, go.”</li> <li>• Shakes head “no” in response to questions</li> <li>• Uses made-up words to refer to familiar objects and experiences that family members and educators understand</li> <li>• Uses some words to refer to more than one thing (e.g., “wowa” may mean both sitting in the stroller and going outside)</li> <li>• Adds new words to their vocabulary every day.</li> <li>• Socializes and interacts with peers using nonverbal (gestural) means, along with words or phrases (e.g., making a motion to push another child away and saying, “Go Away.”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Puts two or more words together to express more complex thoughts (e.g., “All gone bubbles,” “Mommy eat,” “I want,” or “I no want.”)</li> <li>• Uses past tense in simple sentences that may contain errors, such as “I goed to school.”</li> <li>• Uses the possessive, though not always correctly, (e.g., “Her Julia.”)</li> <li>• Starts to label different items with an adjective such as a big chair or blue ball.</li> <li>• Emergent multilingual learners will play with using more than one language in a single sentence or conversation (e.g., “More leche please.”)</li> </ul>

### Ways the educator might support the child’s development:

- Talk to the baby
  - » Use the baby’s home language, if possible
  - » Imitate and repeat the baby’s vocalizations, making meaning of sounds like “ma-ma” and “da-da”
  - » Read and sing in home language/language varieties
  - » Tell the infant stories, especially about their day
  - » Repeat rhymes and songs from the infant’s culture and in-home language(s)
  - » Describe what you are doing during caregiving routines
  - » Narrate the baby’s feelings
- Listen for comfort sounds to discover the things that help the baby feel good and secure
- Respond to the baby’s cry as soon as possible; listen for the differences in the baby’s cries and sounds: is the baby crying because they are in pain, hungry, wet, or in need of attention?
  - Talk with families about what they notice about their children’s language development at home
  - Invite families who speak a different home language to teach you a few key words
  - Learn and sing songs and rhymes in the home languages of the children in your class
  - Play “peek-a-boo” and engage in face-to-face play as well as nose-to-nose games with giggles, laughs, coos, and babbles that become words
  - Sing throughout the day; incorporate the baby’s babbles and favorite words into songs that you make up
- Include books in the learning environment that represent the home languages or language variations and cultures of the children
  - Bend down to the child’s level when they are talking to you
  - Use children’s names when you talk to them
  - Create a language-rich environment with many opportunities for back-and-forth interactions
  - Keep sentences short and to the point. (“I see that you are playing with the ball. Oh look, Carl is also playing with the ball!”)
- Encourage families to read, sing, and play with their child in their home language
  - Have meaningful conversations with the child; notice what they are thinking and talk to them about it
  - Pause and wait for the child to respond to your questions
  - Demonstrate that you are committed to understanding children who speak a different home language than you
  - Reflect on personal biases and assumptions about “proper speech.” Ask families about words and grammar from language variations with which you are unfamiliar

## Over time, and with guidance and encouragement, children become increasingly capable of: **Speaking**

Child will develop the ability to speak and/ or sign in increasingly complete, complex, precise, and varied ways.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Asks questions such as “¿Quieres jugo?” (“Do you want juice?”) along with “when” and “how” questions.</li> <li>• Answers “who,” “what,” “where,” and “when” questions in preferred language (e.g., “Vivo en Nueva York.” [“I live in New York.”])</li> <li>• Uses some pronouns correctly, such as “I,” “you,” “me,” “he,” and “they”</li> <li>• Uses some plural words, like “toys,” “birds,” and “buses”</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses past and future tenses (“Yesterday we went to the park, where I’m gonna have my birthday party!”)</li> <li>• Talks about a variety of topics for different purposes</li> <li>• Demonstrates more complex sentences and precise vocabulary in areas of interest, explaining, for example, “No, that’s not a digger, it’s an excavator!”</li> <li>• Emergent multilingual learners may ask to participate in activities using short sentences or approximations, for example, “Can I play?” or “I play?”</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Initiates and maintains a conversation with peers for exchanges over longer periods of time</li> <li>• Talks about language, as in “I know Spanish,” or “I think that is what you said.”</li> <li>• Responds to the question, “What did you say?”</li> <li>• Uses increasingly complex sentence structure to express thoughts (“I am going to the hospital, but I’m pretending. I’m not going to have the baby. The mommy is going to have the baby.”)</li> <li>• Talks in different ways depending on place and listener</li> <li>• Tells simple stories</li> </ul>

### Ways the educator might support the child’s development:

- Conduct a home language survey at the start of the year and ask families
  - » What languages does the child speak and understand?
  - » What languages does the child speak to their siblings?
  - » In what language does the child play with peers?
  - » What has the child’s exposure to English been?
- Set up the dramatic play area to resemble home and real-life situations to guide and promote language
  - » Include details such as a tablecloth and flowers on a table
  - » Turn the area into a laundromat, fire station, or other community location
  - » Ask families to bring in empty boxes of food to include in dramatic play
  - » Include items that are specific to children’s home cultures
- Learn and use key phrases in the home language of the children
- Sing songs, chants, rhymes, and finger plays in English and the home language to help children learn common phrases and words through music
- Repeat new and interesting vocabulary in different settings and times throughout the day
- Allow children to use translanguaging, which involves using their home language and English interchangeably; children should be encouraged to access all languages available to them
- Sit with children during snack and lunch time to model language and encourage conversation
- Set up your library with books in multiple languages
- Value and make time for extended conversations, and engage in one-to-one exchanges around children’s interests and questions
- Ask open ended questions:
  - » Why do you think...?
  - » What happened when...?
  - » What would happen if...?
  - » What is the story in this picture?

## Over time, and with guidance and encouragement, children become increasingly capable of: **Speaking**

Child will develop the ability to speak and/ or sign in increasingly complete, complex, precise, and varied ways.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Speaks clearly so that others understand</li> <li>• Tells a joke to a friend</li> <li>• Uses most parts of speech or grammar correctly (e.g., uses a contraction)</li> <li>• Uses vocabulary specific to science, math, social studies, and the arts</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Speaks clearly, modifying volume so that all listeners can understand</li> <li>• Asks and answers “who,” “what,” “when,” “where,” and “why” questions about a topic of interest</li> <li>• Refines vocabulary so it better expresses the meaning that they want to express</li> <li>• Categorizes vocabulary by parts of speech</li> <li>• Enjoys puns</li> <li>• Artfully combines English with home language(s) to better convey meaning, play with language, and/or strengthen relationships</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Expresses an opinion or point of view on a story, referring to relevant examples or details</li> <li>• Summarizes a text in a retelling</li> <li>• Uses a wide range of vocabulary specific to academic subjects to explain what they learned in school</li> <li>• Uses their knowledge of home language to find cognates in English</li> </ul>

### Ways the educator might support the child’s development:

- Provide opportunities for children to engage in informal talk throughout the day
- Provide opportunities for children to use new content area vocabulary in conversation and with their family by sending home conversation starters (e.g., “Ask your child about the *geodes* we opened today in science.”)
- When children are engaged in a content area like visual arts, repeatedly use vocabulary specific to their processes, such as “perspectives” and “dimensions”
- Use translanguaging with children, and scaffold their use of academic language by strategic use of home language and English
- Learn key words in the child’s home language related to the topic of study
- Draw on cognates in both English and the child’s home language
- Provide opportunities for children to represent the meaning of words in a variety of ways (e.g. through dance, in song, or in a drawing)
- Choose a sentence that has a complex structure
  - » Engage in word play by altering the vocabulary in the sentence
  - » Chart sentence and unpack meaning
  - » Use sentence starters to practice making new sentences with a similar structure
- Research the bases and parts of words with children; look for and point out meaning in the structure of words



Photo credit: Shannon Taggart

## IV. COMMUNICATION, LANGUAGE, AND LITERACY

# B. Listening and understanding

Child will develop their ability to listen and understand complete, complex, precise, and varied language.



## Over time, and with guidance and encouragement, children become increasingly capable of: **Listening and understanding**

Child will develop their ability to listen and understand complete, complex, precise, and varied language.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Responds to sounds in the environment (e.g., startles or cries when there is a siren or an unexpected sound)</li> <li>• Leans intentionality towards a familiar person's voice</li> <li>• Makes frequent eye contact while listening, and gestures in response</li> <li>• Turns and looks toward familiar sounds and/or words (e.g., when name is called)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Responds to “yes” and “no”</li> <li>• Responds to requests such as “wave bye-bye”</li> <li>• Looks toward door when door-bell rings and educator asks, “Who is it?”</li> <li>• Responds to simple requests or statements accompanied by gestures, such as when the caregiver asks for a specific toy while pointing at it</li> <li>• Shows understanding of the names of most familiar objects and people by looking toward them when they are mentioned</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Points to familiar people when asked where they are</li> <li>• Shows joint attention with adults (e.g., looks at and points to elephant with daddy at the zoo)</li> <li>• Shows understanding of pronouns such as “my” and “your” (e.g., points to their belly button when asked, “Where is your belly button?”)</li> <li>• Identifies people, objects, and actions when asked</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Answers/asks simple questions (Note: child’s answer may not be a response to what was asked, but may instead involve what they want to talk about in the moment)</li> <li>• Demonstrates understanding of simple directions in familiar context by responding appropriately (e.g., “Give daddy the cup, please.”)</li> <li>• Responds to directions that include verbs (e.g., run, jump, reach, open)</li> <li>• Understands statements with descriptive words for time (e.g., “After we clean up, we’ll go to the bathroom.”)</li> <li>• Understands words and phrases associated with family life in their home language</li> </ul>

### Ways the educator might support the child’s development:

- Talk to the baby
  - » Use the baby’s home language if possible
  - » Use rich descriptive vocabulary
  - » Narrate your actions throughout the day
  - » Name familiar people
  - » Pair known words with unfamiliar words (“Bye-bye, fire truck. Bye-bye ambulance.”)
- Sing to the baby.
  - » Use songs with movements
  - » Sing during transitions to and from sleep
  - » Sing songs in the baby’s home language
  - » Do simple, gentle exercises with the baby, singing as you go; for example, holding the baby’s hands, gently lift up, then out, then down, singing “Up, Out, Down”
- Read to the baby
  - » Read starting a birth
  - » Tell a story in the home language based on the pictures
  - » Describe the baby’s actions with the book (“Turn the page, and let’s see what’s on the next page.”)
- When sounds are heard, point them out to the child (“Hear the car? Beep Beep. Hear the train? Choo Choo.”)
- Read books multiple times
- Read books with rhymes and rhythm
- Read books with few words
- Use books that engage the child’s responsiveness and participation
- Play hello and goodbye games; put baby doll or stuffed bear to sleep, saying, “Night night, baby” or “Night night, bear”
- Talk to families about the importance of talking with and reading to their children in their home language
- Include pictures or movements when introducing words to help children understand new vocabulary
- Point to colors and shapes in the real world (“I see a red balloon.”)
- Encourage families to limit screen time and be active viewers with the child by talking about what they are seeing on the screen
- Give specific descriptions of objects, events, and activities in the child’s world (“We are going to school with the blue door tomorrow, and you will see your friends and Miss Tatia.”)
- Read to the child and have them turn the page and answer simple questions. (“Where’d doggy go? Oh, there he is, under the bed.”)

## Over time, and with guidance and encouragement, children become increasingly capable of: **Listening and understanding**

Child will develop their ability to listen and understand complete, complex, precise, and varied language.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Answers questions that show knowledge of events</li> <li>• Asks questions that show attention to activities (e.g., “Why did the boy run away?”)</li> <li>• Follows two-step directions (e.g., “Please put the blocks away, then sit on the rug.”)</li> <li>• Begins to understand opposites (e.g., hot and cold, stop and go, up and down)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Answers open-ended questions</li> <li>• Follows directions that involve a two- or three-step sequence of actions, which may not be related (e.g., “Please pick up your toys, and then get your shoes.”)</li> <li>• Extends/expands the thought or idea expressed by another</li> <li>• Engages in conversation that develops a thought or idea (e.g., talks about a past event)</li> <li>• Listens to others in a group discussion for a short period; gains information through listening</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Responds to multi-step directions or requests (e.g., “First, wash your hands. Then bring me the green towel, and then we will have snack.”)</li> <li>• Observes and interprets details about environment, events, or speakers</li> <li>• Understands words for time, like “yesterday,” “today,” and “tomorrow”</li> <li>• Role plays familiar events described by others, such as a friend’s story</li> <li>• Understands forms of social speech from their family, culture and community</li> </ul>

### Ways the educator might support the child’s development:

- Bring the child to places where you can introduce new vocabulary
  - » Neighborhood walk
  - » Garden
  - » Farm
  - » Grocery store
  - » Zoo
  - » Museum
  - » Post office
  - » Laundromat
- Give clear and simple directions with tasks that you know that the child can accomplish on their own, for example, “Please get the cup from the bottom shelf and place it onto the table.”
- Incorporate opposites into everyday interactions; for example, point out hot and cold objects or cars stopping and going
- Use increasingly complex words, in context, and explain their meaning when talking with child
- Engage in back-and-forth informal conversations about topics that are relevant and important to children’s own lives
- Encourage children to engage in dramatic play in their home language
- Create opportunities for informal extended exchanges between peers throughout the day
- Use wait-time; after asking children a question, pause for at least 3 extra seconds to allow children time to think and respond
- Take dictation of a story, and then have children act the story out as the educator reads it, turning text into action
- Invite children to discuss a topic of study in whole group, small groups and pairs
- Offer children instructions with sequential words (“First do this and then this.”); observe how they follow through
- Encourage emergent multilingual learners to translate vocabulary into their home language and to make connections between topics of study and their own lives

## Over time, and with guidance and encouragement, children become increasingly capable of: **Listening and understanding**

Child will develop their ability to listen and understand complete, complex, precise, and varied language.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Remembers a story that a friend told yesterday</li> <li>Responds and can follow a sequence of two- or three-step directions in a row</li> <li>Listens to a peer's idea and participates in a conversation with a partner</li> <li>Compares or uses specific traits to describe characters in a story that the educator has told</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Understands positional and directional words (e.g., here, there, over, next to, in front, under, or between)</li> <li>Becomes logical in their comprehension of vocabulary (e.g., figures out the meaning of words based on their root)</li> <li>Demonstrates knowledge of sequence of events and understands cue words and phrases (e.g., before, yesterday, later that day, after, next year)</li> <li>Uses clues in story they have heard to make inferences</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Listens to peers and attends to conversational turns in a small group</li> <li>Attends during a presentation by a guest speaker who shares about a topic for a sustained period</li> <li>Shows refined understanding of social contexts and uses gestures or nonverbal behavior to respond to situations</li> </ul>

### Ways the educator might support the child's development:

- Listen and provide feedback to clarify and extend understanding; for instance, restate in another way or use an image or a gesture to clarify
- Engage peers in a variety of activities in a range of different topics that foster sustained interactions
- Use translanguaging between English and home languages to encourage participation and keep children in the conversational loop
- Make comparisons with familiar characters and plots to sustain interactions
- Reinforce key vocabulary and content words in activities; for example, play games such as Simon Says to strengthen understanding of prepositions or classification games to deepen understandings of meanings
- Use role plays with partners or small groups to establish understanding of characters and relationships
- Model body language as an active listener to extend conversation
- Draw on home languages or actively encourage partners to speak it to reinforce and ensure understanding
- Model strategies for self-monitoring, understanding, and using questions to clarify
- Ask peers to elaborate or role play the ways in which partners can request more information to increase understanding
- Structure activities that include speaking with partners and using specific words or parts of speech; for example, interviewing about something in the past that requires understanding of verbs in past tense
- Use think-aloud or sentence starters to model the thinking process and encourage understanding of one's own or a character's feelings, changes, motivations, and inner thoughts



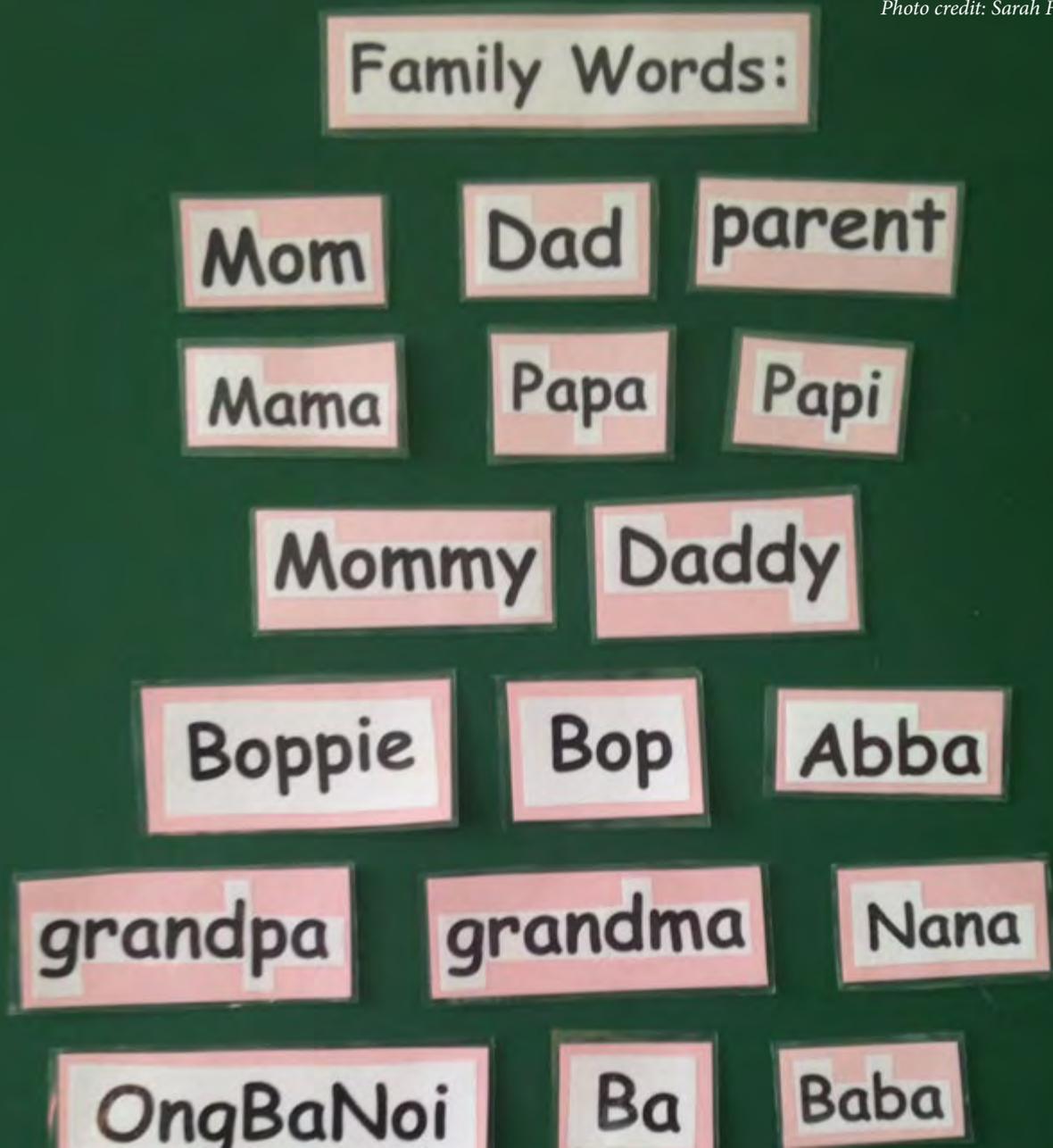
Photo credit: Shannon Taggart

## IV. COMMUNICATION, LANGUAGE, AND LITERACY

# C. Social Communication

Child uses language to relate to others according to the social expectations of their family, community, and culture.

*Photo credit: Sarah Ferholt*



## Over time, and with guidance and encouragement, children become increasingly capable of: **Social Communication**

Child uses language to relate to others according to the social expectations of their family, community, and culture.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Looks at a caregiver as they are speaking</li> <li>Uses sounds and whole-body gestures to engage in interactions with educator</li> <li>Repeats and imitates cooing sounds</li> <li>Uses facial gestures to engage with adult (e.g., blinking eyes, sticking out tongue, clapping, covering face with hands)</li> <li>Makes sounds when educator is singing</li> <li>Waves bye-bye</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Participates in a conversation by making sounds or using words in response to adult (e.g., educator says, “Mmm” when feeding the baby, and the baby says, “Mmm” back)</li> <li>Begins to demonstrate turn-taking in conversation by babbling and then pausing and looking to educator to respond</li> <li>Makes eye contact when vocalizing or being spoken to, as appropriate to cultural context</li> <li>Initiates conversations by bringing objects to show caregivers</li> <li>Differentiates between tones of voice (angry, friendly) and smiles back at caregiver as appropriate</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Starts to shake head “Yes” or “No” in answer to simple questions</li> <li>Makes requests by pointing and vocalizing</li> <li>Repeats themselves if the educator does not respond or understand them</li> <li>Talks into pretend phone and then pauses, as if to listen to the other person</li> <li>Makes related comments (e.g., when adult says, “Here is your water,” child says, “cup,” “<i>agua</i>,” or “water cup.”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Sustains conversation about a single topic for one or two turns</li> <li>Makes a request or response (e.g., “I can,” “Yo quiero,” or “I want.”)</li> <li>Repeats part of what the educator said to continue the conversation</li> <li>Uses translanguaging, such as “That’s my abuelita.”</li> <li>Uses single and paired words to command, indicate possession, express problems, and gain attention</li> <li>Answers questions such as “What’s that?” and “Where is it?”</li> <li>Begins using language to engage others in pretend play</li> </ul>

### Ways the educator might support the child’s development:

- Talk with the baby’s family about how the baby expresses different needs, interests and feelings
- Practice recognizing the intention of the baby’s vocalization or gestures
- Respond to the baby when they communicate through facial expression and whole-body movements
- Talk to the infant, then pause and wait for a gesture or sound before saying something else
- Emphasize names of family members and others when they come in close proximity to the baby
- Model social cues and skills; say “Hello,” “Goodbye,” and “How are you?”
- Play social games of peek-a-boo, hide-and-seek, blow and pop bubbles, patty cake, or musical games where objects are passed and returned
- Learn greetings and social phrases in the child’s home language
- Play games that encourage back and forth interactions
  - Catch and release
  - Hide-and-seek
  - Peek-a-boo
  - Open and shut them
  - Run away and jump into my arms
- Ask questions when the child points to something, and wait for the response of the child before proceeding
- Use phrases like “my turn,” “your turn,” and “When you’re finished, can I have a turn?”
- Encourage awareness of the larger social world by participating in activities where familiar faces are seen and community is encouraged.
  - Take a walk around the local park
  - Visit the library
  - Go to the farmer’s market

## Over time, and with guidance and encouragement, children become increasingly capable of: **Social Communication**

Child uses language to relate to others according to the social expectations of their family, community, and culture.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Asks questions about the current activity (“Can I have a brown crayon?”)</li> <li>• Begins to take turns during conversations</li> <li>• Makes formal requests or responses, such as “May I please…” and “Thank you.”</li> <li>• Recognizes what rising and falling speech sounds mean and attempts to answer questions</li> <li>• Acknowledges a partner’s message using fillers, such as “yeah” and “ok.”</li> <li>• Begins code-switching and uses simpler language when talking to very young children</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Adds to a conversation by retelling a similar experience (“I love ice cream too, and I had some vanilla yesterday.”)</li> <li>• Initiates an exchange to provide information or to clarify (“My teacher said today is Monday. On Mondays I go to karate!”)</li> <li>• Takes turns on topic in an extended exchange, and shows knowledge of the speaker/listener role</li> <li>• Switches language or mode of communication as appropriate with family member or person with whom they are speaking</li> <li>• Tells stories with chains of events and actions</li> <li>• Uses terms that have meanings that are dependent on context, such as “this,” “that,” “here,” and “there”</li> <li>• Experiments with the effects some words (such as “Poo-poo head”) can have on others</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Pays attention to speaker in a conversation</li> <li>• Takes turns during group conversations, raising hand to speak, with reminders</li> <li>• Emergent multilingual children gauge and then speak in the dominant language of communication used by the person with whom they are speaking</li> <li>• Provides additional information to clarify when listener does not understand the child’s meaning</li> <li>• Uses language to persuade or to state an opinion</li> <li>• Uses body language, facial expressions, and tone to predict behavior</li> <li>• Tells stories with characters and a more complex sense of structure to events and actions</li> </ul>

### Ways the educator might support the child’s development:

- Model polite language in social situations, such as saying “Please” and “Thank You”
- When asking questions, pause and wait for answers; the child may need time to think about the answer
- If child interrupts another child, say something like, “Frank was talking. Why don’t we wait and see what he has to say and then respond? I know you have something else to say but let’s let Frank continue.”
- Encourage children to speak to classmates who share their home language
- Provide visual supports for turn-taking during group conversations
  - » Write a list of who will be speaking next, and check it off
  - » Use a “talking-stick” that the speaker holds and passes when they are done talking
- Provide scripts for children to initiate social interactions. (“I see you watching your classmate play in the sandbox. if you want to play with them, let’s think about what you could say.”)
- Establish norms for structured group conversations, ensuring that all children have the opportunity to be heard (e.g., an expectation that there will be only one voice at a time)
- Provide children with time to interact socially throughout the day
- Discuss social dynamics with children. (“Some kids have been asking to sit together at lunch every day. How does it seem if they sit together every day?”)

## Over time, and with guidance and encouragement, children become increasingly capable of: **Social Communication**

Child uses language to relate to others according to the social expectations of their family, community, and culture.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Understands the body language or facial expression of a peer and uses it to check in with or to modify language and/or behavior with that child</li> <li>• Converses with a partner taking a number of turns and building on and extending the topic</li> <li>• Shares knock-knock and other jokes with peers</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Makes up secret languages</li> <li>• Uses language to include or exclude children from peer groups</li> <li>• Navigates different ways of using language and flexibly uses different forms and variations to improve communication or affiliation</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Takes the perspective of another person in a group into account and modifies their language use or actions as needed</li> <li>• Converses on a topic, maintaining attention to what the other person understands and sharing their own understanding</li> <li>• Uses language to persuade and argue opinions and to understand and respond to another’s point of view</li> </ul>

### Ways the educator might support the child’s development:

- Talk to families about children’s use of social language outside of school; Find out if a child who is quiet at school is talkative at home or in their community
- Observe emergent multilingual children’s use of social language when they are speaking in their home language
- During read-aloud time, invite predictions about characters’ relationships and interactions (“What might this character say to this one if she has that feeling?”)
- Observe and reflect on children’s use of social language in non-academic environments such as the playground
- Provide time for children to discuss social interactions and how those interactions made them feel
- Be aware of whose voices are not being heard in group conversations and provide supports for all children to participate
- Teach children language that they can use to resolve social conflicts
- Establish norms for social communication in the learning environment
- Teach children to identify micro-aggressions: brief hostile, negative prejudicial slights and insults toward any group
- Ask children to write from the perspective of someone from a different time or place
- Invite children to develop and share a point of view on a topic of interest



Photo credit: Sherry Cleary

## IV. COMMUNICATION, LANGUAGE, AND LITERACY

# D. Engaging with Stories and Books

Child enjoys, attends to, understands, and makes meanings from spoken and written language of storytelling and books.



## Over time, and with guidance and encouragement, children become increasingly capable of: **Engaging with Stories and Books**

Child enjoys, attends to, understands, and makes meanings from spoken and written language of storytelling and books.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Smiles, babbles, and laughs when the educator reads, sings, or tells stories to them</li> <li>Touches, feels, manipulates, and tastes books</li> <li>Looks at books presented by the educator</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Looks at a picture book with an educator and makes sounds</li> <li>Shows preference for certain stories or texts, such as lift-the-flap books</li> <li>Smiles, dances, or sings along to familiar songs</li> <li>Shows pleasure when caregiver shares an image, tells a story, or sings a lullaby (e.g., smiles or vocalizes)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Points to and names familiar people and objects in photos or books</li> <li>Points to pictures related to the text the educator is reading</li> <li>Holds board books upright and turns pages</li> <li>Imitates gestures that go with rhymes or simple songs, such as “Row, Row, Row Your Boat” or “Pin Pon”</li> <li>Listens to a story or looks at books for a short period of time</li> <li>Responds to storytelling and texts with short questions, comments, or movements (e.g., flapping their arms when a bird appears in a book)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Contributes language from the text at the expected time (e.g., calls out “Caps for sale! Fifty cents a cap!” during a group reading of that book)</li> <li>Asks for or picks out favorite story to read at bedtime or during play</li> <li>Starts to point to words in the book and pretends to “read” them aloud</li> <li>Spends time looking at books by themselves</li> </ul>

### Ways the educator might support the child’s development:

- Talk, sing, and tell stories to babies throughout the day
- Look at books with babies and talk to them about the images in their home language
- Hold the baby and book at the same time; involve the baby in repeating sounds over and over, which promotes playfulness, enjoyment, and engagement
- Include a variety of books in the learning environment
  - Cloth books with different textured pages that the child can safely chew on and manipulate
  - Books that have interactive components like flaps and holes
  - Books of songs
- Follow the baby’s lead; if they want to open and close the pages rather than reading sequentially, do so, talking about what they are doing
- Look at books with the child sitting on your lap, taking time to talk about the pictures they show interest in
- Point to the pictures that represent the words that you are saying
- Read in short spurts if necessary, gradually reading more if the child shows interest
- Use accessories to engage children in the book or story
  - Puppets
  - Hats
  - Stuffed animals
  - Dolls
  - Little toys
- Create a classroom library including
  - Baskets of books
  - Bookshelves
  - Cookbooks
  - Coloring books
  - Books with photographs
  - Family albums
  - Plastic books
  - Textured books
  - Pop-up and lift-the-flap books
- Draw the baby’s attention to print-related activities
  - Read the subway map
  - Cook from recipes
  - Look at catalogues
  - Look at menus
  - Narrate actions as you write a grocery list
  - Discuss the mail
  - Point out and identify store signs
- Read the child’s favorite books many, many times, because repetition is comforting and promotes enjoyment.
- Use movements that correspond with the songs and stories that are being read
- Select books that are connected to a child’s life
  - Read books in the child’s home language
  - Read books that take place in the child’s community or culture
  - Read baby books to a child whose sibling was just born
  - Read books related to the child’s developmental experiences (e.g., toilet learning)
- When reading, emphasize connections with the child’s lived experience; while reading a book about going to the doctor, for example, point out similarities to the child’s own doctor, or when reading about a market trip, comment on the foods a child might see in their local store

## Over time, and with guidance and encouragement, children become increasingly capable of: **Engaging with Stories and Books**

Child enjoys, attends to, understands, and makes meanings from spoken and written language of storytelling and books.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Makes connections between their experience and the experience of a character in a story or text (e.g., telling a friend at the park, “I’m planting seeds, just like Harold.”)</li> <li>• Delights in stories and texts (e.g., looks at books independently, laughs at a humorous story, has a favorite book of poems, or treasures a birthday party invitation)</li> <li>• Demonstrates emergent reading behavior (e.g., holds a book and reads aloud to dolls or stuffed animals; shows pictures or repeats memorized part of text)</li> <li>• Turns pages of a familiar book in the direction that print follows in their home language</li> <li>• Demonstrates understanding of narratives by telling and retelling stories nonverbally and/or verbally</li> <li>• Asks and answers “what,” “where,” “who,” and “why” questions about books and during read-aloud sessions</li> <li>• Uses background knowledge to connect with culturally relevant stories or pictures</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Looks for and finds texts that are enjoyable to look at or read from a library</li> <li>• Participates in dialogue about stories, images, or texts in preferred language (e.g. says, “<i>También me gusta.</i>”)</li> <li>• Talks about characters in stories or texts, such as something funny that characters said or did</li> <li>• Retells a favorite story or text in play, imitating the rhythm or structure of the story/text (e.g., creating a coconut tree from a paper towel roll and using letter magnets to retell the book <i>Chicka Chicka Boom Boom</i>)</li> <li>• Asks and answers open-ended questions about the meaning of pictures or texts (e.g., “How do the colors that the illustrator used make you feel?”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Expresses an opinion about a story</li> <li>• Compares stories with one another (e.g., “In all the Skippy Jon Jones books, Skippy goes on adventures in his closet.”)</li> <li>• Asks questions about the stories and texts</li> <li>• Makes predictions about what will happen in stories or texts based on adult modeling</li> <li>• Responds to stories or texts by incorporating characters and narratives from them into dramatic play</li> <li>• Uses books to learn more about topics of interest (e.g., creates a map of the subway system based on text and their lived experience)</li> </ul>

### Ways the educator might support the child’s development:

- Talk to families about joining the library
- Visit the local library with children, and invite the librarian to visit your class
- Read books one-on-one with a child; allow the child to gaze at pictures in books that have caught their interest, and talk about the pictures with them
- Provide various texts, pictures, photographs, and books that reflect the home cultures of the children in the classroom
- When reading a book, if the children become unengaged, gently close the book and move on to the next activity
- When reading to the whole group, allow the children to sit in a group, not a circle, to promote optimal viewing of the text and pictures
- Display books at the child’s level so that they are able to access them throughout the day
- Keep favorite books available to children and rotate new books, including non-fiction books into the learning environment
- Before reading a book, look at the cover with the children; ask, “What do you think will happen in this story?”
- Use self-talk to describe comprehension strategies (e.g., “I see that the illustrator used bright yellow, orange, and red, and those colors make me feel happy.”)
- Read some story books from start to finish so that children may enjoy the plot
- When reading non-fiction books, pause on a page to ask and answer questions about the pictures
- Select and create texts related to children’s interests and unit of study to reread multiple times; create connections from these texts to learning centers
- Include books in all areas of the learning environment
- Read a variety of books aloud daily
  - » Picture books with shorter and longer text
  - » Chapter books
  - » Non-fiction texts
  - » Poetry
- When reading, pause to define new, unfamiliar, and interesting words, and invite students to use them
- Summarize and retell stories
- Give children the opportunity to return to familiar books and stories, in order to play with storylines and characters. (e.g., after reading several versions of *Stone Soup*, child writes “Stone Soup Recipes”)
- Activate children’s background knowledge and encourage them to connect texts to their own lives
- Build children’s background knowledge by helping them understand texts through field trips and experiential learning
- Create book time for children to look at and “read” self-selected books on their own and with friends

## Over time, and with guidance and encouragement, children become increasingly capable of: **Engaging with Stories and Books**

Child enjoys, attends to, understands, and makes meanings from spoken and written language of storytelling and books.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Listens to a nonfiction book and shares a personal connection (e.g., connects with text about a family from Mexico and the United States by stating, "I am from both places too.")</li> <li>• Understands and responds to a favorite part of a book during buddy reading</li> <li>• Retells a story from a picture book (e.g., summarizes a plot about how a neighborhood transforms with mural art)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Reads independently for pleasure</li> <li>• Paraphrases a part of a book and explains why it is important</li> <li>• Monitors own comprehension and understanding in a variety of ways</li> <li>• Reads an informational book to learn about an area of interest, using text features such as the glossary to find information</li> <li>• Hears a well-known story told by a friend and compares it to a movie version of the same story, pointing out differences in the main character</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Reads all the books in a series</li> <li>• Slows down when the text becomes more difficult to read</li> <li>• Makes an argument with relevant details during a book discussion (e.g., uses information learned from watching a National Geographic television program to add to a discussion of a book)</li> <li>• Reads a letter from a friend and responds to social questions</li> <li>• Identifies an author's purpose (e.g., "I think the author wanted to teach people not to be afraid to try new things. I'm going to go to try to do the monkey bars.")</li> <li>• Consults other books, maps, websites, hyperlinks, and photographs to enhance their reading</li> </ul>

### Ways the educator might support the child's development:

- Engage in extended conversation and dialogue about what children notice when they read
- Listen to what children say in response to open-ended questions and clarify, expand, or extend their ideas
- Ask peers to respond to other children's questions and comments about their reading
- Use self-talk to model making connections to a story
- Ask children if they have ever had an experience similar to the character in the story
- Ask children to draw a picture in response to a story they heard read aloud
- Scaffold thinking about the narrative structure of stories and books in a variety of genres
  - » In fictional genres, think aloud about:
    - 1) the beginning and the introduction to the main character, 2) the middle and the main character's problem, and 3) predict or ask what might happen at the end.
  - » For an informational text, think aloud about: the main idea, examples, and key details.
- Give children time to respond to texts in a variety of ways
  - » Assign parts to act out a book or story
  - » Encourage children to collaborate, improvise, and use props to perform the story
- Establish centers where children can make art or explore science materials in response to books or stories on a theme or topic



Photo credit: Shannon Taggart

## IV. COMMUNICATION, LANGUAGE, AND LITERACY

# E. Phonological awareness

Child develops the ability to recognize and manipulate the different sounds in spoken language(s).



## Over time, and with guidance and encouragement, children become increasingly capable of: **Phonological awareness**

Child develops the ability to recognize and manipulate the different sounds in spoken language(s).

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Listens, attends to, and reacts to speech sounds in the environment</li> <li>• Babbles and makes sounds exploring different ways to vocalize (e.g., “ba-ba” and “eee”)</li> <li>• Imitates sounds heard in familiar spoken language(s)</li> <li>• Is more attuned to the speech sounds of their home language than those of other languages</li> <li>• Reacts differently to an unfamiliar sound by gazing or attempting to recreate sound</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Produces lengthy consonant-vowel-consonant-vowel babbles (e.g., a-ga-a-ga a-ga)</li> <li>• Makes animal sounds from their home language</li> <li>• Changes tone when babbling so that their babbling sound more like the speech sounds of their home language</li> <li>• Demonstrates understanding that a word is a combination of sounds by creating own words to represent something (e.g., calls their brother “Buba”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Speech shows their ability to use a variety of sounds and syllables from their home language</li> <li>• Imitates sounds of adult speech to quickly learn new words</li> <li>• Attends to, repeats, and uses a few words from culturally and linguistically familiar rhymes, phrases, or refrains from stories or songs</li> <li>• Laughs when adult makes up rhymes containing non-sense words</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Imitates substitution of the first sound in a word to rhyme (e.g., substitutes the initial sound of the name of friends to play a rhyming game or sing “Willaby Wallaby Woo.”)</li> <li>• Plays with sounds of words in context, and makes silly substitutions</li> </ul>

### Ways the educator might support the child’s development:

- Create sounds rooted in playful interactions with the child; show a photo of an animal or an object from a book and make the appropriate sound (“cluck, cluck,” “pio, pio,” or “choo choo,” for example)
- When a sound is heard, mimic and identify it, over-emphasizing the phonemes
- Recreate sounds and vocalizations playfully
- Include books, rhymes, and songs in the environment
- Sing familiar songs and change the lyrics (“The horn on the bus goes beep beep beep; the dogs on the bus go ruff, ruff, ruff”)
- Sing and chant nursery rhymes
  - » This Little Piggy Went to Market
  - » Open Shut Them
  - » The Itsy Bitsy Spider
  - » Down, Down Baby
  - » Mr. Foster Came from Gloucester
- Repeat books and stories over and over with enthusiastic rhythmic intonations (e.g., *Please Baby Please*, by Spike Lee and Tonya Lewis Lee)
- Talk about animal sounds and sounds in the environment by using descriptive words (“The bus made a very loud sound when it stopped!”)
- Draw focus to words with similar endings (e.g., Oh, yes, you have a nose, and the nose smells the rose!”)
- Read stories with short sentences that emphasize rhyming sounds (e.g., *Brown Bear Brown Bear What Do You See?* by Eric Carle)

## Over time, and with guidance and encouragement, children become increasingly capable of: **Phonological awareness**

Child develops the ability to recognize and manipulate the different sounds in spoken language(s).

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Repeats simple familiar rhymes or sings favorite songs</li> <li>• Shows enjoyment of rhyme and alliteration (e.g., sings to themselves, “Mee, gee, fee, tee”)</li> <li>• Participates in a read-aloud with a rhyming pattern, filling in the missing rhyming word</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Demonstrates rhyme recognition, such as identifying which words rhyme from a group of three like hat, log, and cat</li> <li>• Recognizes phonemic changes in words, such as noticing the change in “Old McDonald had a charm”</li> <li>• Provides a rhyming word such as “clay!” when given the clue “I’m thinking of something like play dough that we have out at the art area that rhymes with play.”</li> <li>• Notices and identifies words that start with the same sound</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Demonstrates awareness that spoken language is composed of smaller sound segments (e.g., labels a drawing using initial sounds)</li> <li>• Shows word awareness by isolating a single word from a sentence</li> <li>• Produces one or more words that rhyme with another word (e.g., “What rhymes with log?”)</li> <li>• Provides a word that fits with a group of words sharing an initial sound (e.g., “Sock, Sara, and Song all start with the /s/ sound. What else starts with the /s/ sound?”)</li> <li>• Produces the sounds made by many letters</li> <li>• Uses initial and some final sounds in invented spelling (e.g. writes, “IATK” For “I ate cake”)</li> <li>• Emergent multilingual children show awareness of sounds from home language(s)</li> </ul>

### Ways the educator might support the child’s development:

- Incorporate finger plays and interactive stories into everyday meetings (e.g., *Here is the Beehive*; *5 Little Ducks*)
- Make felt board characters for favorite rhymes that children can interact with outside of circle time
- Encourage children to “fill in the blank” with rhyming words by using stories and pictures
- Include rhyming books and songs in the environment to encourage phonological awareness
  - » *The Very Hungry Caterpillar*, by Eric Carle
  - » *Chicka Chicka Boom Boom*, by Bill Martin Jr.
  - » *I Ain’t Gonna Paint No More*, by Karen Beaumont
  - » *Mama Llama Red Pajama*, by Anna Dewdney
  - » *There Was an Old Lady Who Swallowed a Fly*, by Pam Adams
  - » “Juanito Cuando Baila”
- Include alphabet books in the learning environment
  - » *Alphabet City*, by Stephen T Johnson
  - » *Chicka Chicka Boom Boom*, by Bill Martin Jr.
  - » *I Spy An Alphabet in Art*, by Lucy Micklethwait
  - » *Eating the Alphabet*, by Lois Ehlert
  - » *Alligators All Around*, by Maurice Sendak
  - » *On Market Street*, by Arnold Lobel
- Sing songs and recite poems and rhymes, such as “BINGO,” and “I Like to Eat Apples and Bananas”
- During read-aloud and other small and large group discussions examine words for sounds and letters that represent them; do this for words that are meaningful to children, such as letters/sounds of their names
- Introduce longer songs that rhyme, which allow children to make up their own rhymes (e.g., sing “Down By The Bay” and incorporate lines like: “Have you ever seen a fish making a wish?”)
- Point out sound-letter correspondences, especially in high-interest words and/or children’s names
- Encourage children to label objects in their drawings with initial letters
- Teach word-learning strategies such as making connections to home languages

## Over time, and with guidance and encouragement, children become increasingly capable of: **Phonological awareness**

Child develops the ability to recognize and manipulate the different sounds in spoken language(s).

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Generates a group of rhyming words from one word</li> <li>Segments simple words into their initial, middle, and ending sounds</li> <li>Taps out the number of syllables in a multisyllabic word</li> <li>Changes the middle sound of a short word to make a new word (e.g., changes dog to dig by substituting the “i” sound for the “o” sound”)</li> <li>Uses first, last, and some middle sounds in invented spelling (e.g., writes, I WNT TO THE PRK for “I went to the park.”)</li> <li>Begins to explore and identify blends such as “pl” in play and “br” in brown</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Explores and identifies the concept of silent “e” (e.g., adds “e” to “hid” to change the word to “hide” and understands the vowel sound has changed)</li> <li>Develops awareness of letters that have more than one sound (e.g., notices the “o” in “row” makes a different sound than the “o” in “dog”)</li> <li>Incorporates blends, digraphs, prefixes, and suffixes into their invented spelling</li> <li>Uses segmenting in order to read larger words by breaking word down into initial sounds or syllables (/fac/ /tor/ /y/ for factory)</li> <li>Recognizes the base of a word and common prefixes and suffixes and uses them to make different words (e.g., “trans,” “port,” and “ed” or “ing”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Asks about rhymes in languages other than their own (e.g., “What rhymes with Estrella?”)</li> <li>Repeats sophisticated tongue twisters, such as “Peter Piper picked a peck of pickled peppers,”</li> </ul>

### Ways the educator might support the child’s development:

- Explore sounds of the alphabet by playing a clapping game (“When I say a word that starts with an “m,” clap your hands!”)
- Create an activity in which children can listen to beginning and ending sounds, noting the difference between each
- Play familiar games with rhymes (hand claps, jump rope chants) invite a family member to come in to introduce the game
- Introduce a book such as *Adivinanzas in Mixteco (Riddles in Mixteco)* that is written or translated into several different languages and language varieties; ask families about riddles in their home languages
- Explore vowel sounds by singing songs in a variety of languages (e.g., “Juanito Cuando Baila”)
- Invite children to compose a song for a friend by changing the lyrics of a favorite song to personalize it
- Play a familiar card game, and replace cards with images and words that match; for example, children can play “Go Fish” and ask for a word that rhymes with the card they have
- Invite students to create their own rhyming poems, songs, or haikus



## IV. COMMUNICATION, LANGUAGE, AND LITERACY

# F. Composing

Child uses materials and/ or language to make meaning for themselves and/or an audience.



Over time, and with guidance and encouragement, children become increasingly capable of: **Composing**

Child uses materials and/ or language to make meaning for themselves and/or an audience.

0–9 months	8–16 months	15–24 months	24–36 months
		<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Makes decisions about how to manipulate and order objects in the environment (e.g., drops crayons into a paper towel tube)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses objects such as stuffed animals or action figures to act out simple stories (e.g., going to bed and waking up)</li> <li>• Organizes visual materials (e.g., play dough, paint, collage); may not intend to represent something or may change what they are representing throughout the process</li> <li>• Pretends to be a character (e.g., puts on cape and flies like Superman)</li> </ul>

**Ways the educator might support the child’s development:**

- Set up an overhead projector, and allow children to experiment with making shadows against the wall
- See children’s manipulation of objects as holding meaning and or significance for them even if temporary
- Acknowledge the marks children intentionally or accidentally make with crayons or markers
- Observe children’s interactions with toys and art materials
  - » Are they telling a story as they play?
  - » Are they arranging objects and marks with greater intentionality?
  - » Are they pretending to be a character?
- Acknowledge and extend children’s story-making
- Provide many and varied writing tools and materials, including markers, crayons, pencils, and chalk

## Over time, and with guidance and encouragement, children become increasingly capable of: **Composing**

Child uses materials and/ or language to make meaning for themselves and/or an audience.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses stuffed animals or small figures to recreate events from their lived experience or from media</li> <li>• Draws to represent an idea or experience; drawing may not be recognizable</li> <li>• Scribbles, or draws letter-like shapes and says they are writing</li> <li>• Dictates a short story to be read aloud and acted out (e.g., “Daddy came home and made dinner. Batman ate dinner too.”)</li> <li>• Plans dramatic play with peers (e.g., “You be the baby and I’ll be the mommy. And I’ll go to work, ok?”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses visual art materials (e.g., drawings, paintings, sculptures, and collages) to express ideas, knowledge, and feelings</li> <li>• Begins to form letter shapes that resemble the script of their home language</li> <li>• Attempts to write own name</li> <li>• Combines drawing and emergent writing (e.g., child draws their friends and labels them with rows of scribbles and shapes that resemble home language or English)</li> <li>• Narrates a storyline that involves multiple characters and actions that occur in a specific setting (e.g., pretend family takes a trip to the beach)</li> <li>• Dictates a story to an adult to transcribe in their home language</li> <li>• Uses environmental print to communicate (e.g., draws orange circle with an “M” inside to tell about their trip to the Met’s game)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Collaborates on shared writing (e.g., contributes a sentence to a class letter thanking the custodial staff)</li> <li>• Uses drawing and invented spelling to tell an original story of connected events or related ideas on a topic</li> <li>• Shares expertise about a topic of interest through a verbal presentation, drawing, and/ or writing</li> <li>• Collaborates with peers to recount an event, each child adding to the story</li> <li>• Plans and extends dramatic and symbolic play with peers</li> <li>• Develops characters and settings within dramatic play</li> <li>• Composes messages that approximate the features and qualities of scripts in more precise ways (e.g., writes more recognizable letters; writes from left to right in English)</li> </ul>

### Ways the educator might support the child’s development:

- Learn about, support, and show respect for children’s home languages and cultures
- Encourage families to share photographs from home and write down children’s words about what is happening in the photo
- Invite children to tell you about what they just wrote or drew
- Observe children as they pretend to write. Are they moving their pencil in the same direction as the script in their home language?
- Observe children’s composing in the dramatic play area
  - » Are they planning roles?
  - » Are they dramatizing characters?
  - » What scenarios are they acting out?
- Include text in the children’s home languages in the learning environment
  - » Welcome sign on door
  - » Labels for where learning materials go
  - » Hand-washing directions
- Take dictation of children’s narration of their drawing, showing the children that the words they say become text with writing; reread their words with them
- Notice and acknowledge children’s various composing processes
- Set up a letter-writing station for writing to their peers, parents, siblings, and other family members; have envelopes, pieces of paper that children can make into stamps, and other letter-making materials
- Create shared texts for the class by writing familiar songs, rhymes, and poems on posters
- Provide writing paper with space for drawing and some lines for writing
- Allow children to collaborate in groups with peers who share their home language
- Assume that children are making sense with their early writing; when a child writes on their own a string of letters that do not make sense to the educator, the educator asks, “What story did you write?” or “What story do your words tell?”

## Over time, and with guidance and encouragement, children become increasingly capable of: **Composing**

Child uses materials and/ or language to make meaning for themselves and/or an audience.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses drawing and invented spelling to write about an experience, idea, or topic</li> <li>• Follows some social rules for composition (e.g., begins messages with “Dear” or “To” and concludes with “Love” or “From”)</li> <li>• Adds their own ideas to a story their peers are making up</li> <li>• References known stories and styles in their own composing (e.g., reads several versions of <i>Jack and the Beanstalk</i> and dictates their own version.)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Varies the types of sentences that they use in their compositions</li> <li>• Writes stories with a beginning, middle, and end</li> <li>• Collaborates with a peer to plan, write, and illustrate a story</li> <li>• Plans and develops a writing composition over the course of several days</li> <li>• Uses an editing checklist to try to incorporate features of non-fiction (For example, to revise the non-fiction book <i>All About Birds</i>, the child uses a checklist and adds a Table of Contents)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Composes a letter to a friend that uses their home language variation</li> <li>• Makes a case in a debate by stating an argument, investigates information, and includes reasons with relevant supporting details in writing</li> <li>• Writes a version of a fairy tale with a character using a particular voice</li> <li>• Seeks to master mature styles of composition (e.g., draws scenes for a comic book or graphic novel)</li> <li>• Uses resources to enhance their compositions (e.g., uses a thesaurus to find a word with a particular nuance to express an emotion or idea)</li> </ul>

### Ways the educator might support the child’s development:

- Brainstorm ideas for compositions with children
- Make time for children to share a scene or to act out parts of a story for a peer audience with props
- Celebrate children’s completed compositions with a publishing party
- Discuss contrasting features of a child’s home language with English, such as use of accent marks in Spanish and English
- Explore the scene or setting of a play by talking about the author’s word choice
- Model writing the beginning of a story, and revise it to introduce the main character’s personal voice
- Ask children for explanations of why they made certain choices while authoring
- Challenge children to use rich vocabulary and complex sentences in their compositions
- Welcome and celebrate the variety of children’s composing processes
- Discuss what makes an argument effective and how to find an equally effective counterargument
- Provide models of approaches to composition; discuss and chart an author’s intent or purpose across various types of texts in an author’s body of work (e.g., discuss the purpose of Patricia Polacco’s *Chicken Sunday*, *Thank You, Mr. Falker*, and *Pink and Say*)



Photo credit: Sherry Cleary

## IV. COMMUNICATION, LANGUAGE, AND LITERACY

# G. Creating and interpreting multimedia texts

Child views, creates, and makes meaning of visual communication and multimedia documentation, which includes drawings, collections, photographs, videos and displays.



Photo credit: Justin Weiner

## Over time, and with guidance and encouragement, children become increasingly capable of: **Creating and interpreting multimedia texts**

Child views, creates, and makes meaning of visual communication and multimedia documentation, which includes drawings, collections, photographs, videos and displays.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Tracks people or objects by moving their head or eyes</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Reacts differently to a video of themselves than to a video of another familiar person</li> <li>When talking to a family member on a video chat, crawls behind the laptop to see where the person is</li> <li>Tries to climb inside or take objects out of images (e.g., positions foot as if to climb inside a car depicted in a book)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Identifies themselves and familiar people in photographs</li> <li>Notices and identifies pictures, road signs, and graphics</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Makes connections between a display of objects or images of personal experiences.</li> </ul>

### Ways the educator might support the child’s development:

- Limit cell phone and TV access to meaningful moments such as video-chatting with a grandparent
- As the child lifts their head or follows with their eyes in response to sounds and voices, name the individual or object in the environment
- Alter the child’s position in relationship to their interest
- Place pictures and mirrors low on the wall or by the side of changing table so that the child can gaze at them as diaper changing and play occurs
- Ask families before creating visual images of their child; be mindful of cultural and religious prohibition about image-making
- Create family photo murals and post them at the child’s eye level in the learning environment
- Use video, audio, and photographs to document skills and experiences the child is interested in, such as rolling, crawling, swinging, and dancing
- Take time to look at documentation of children’s development with children, families, and colleagues
- Document the development of a child’s interest or skill over time
- Look at the evidence of their curiosity and learning with them
- Take photographs of local landmarks, familiar community members, or children’s houses; make a book of them or post them in the classroom
- Document experiences that were meaningful to the child, such as a time they jumped off a step, and use the documentation to reflect on the experience with the child
- Use photographs of the children in the classroom to create a picture schedule of the day

Over time, and with guidance and encouragement, children become increasingly capable of: **Creating and interpreting multimedia texts**

Child views, creates, and makes meaning of visual communication and multimedia documentation, which includes drawings, collections, photographs, videos and displays.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Collects and shares objects with others (e.g., on a nature walk collects acorns and leaves to show educators and peers)</li> <li>• Makes connections between documentation boards, drawings, and charts and past events (e.g., the child looks at a documentation board of the class trip to the fire station and says, “We saw the big hose.”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses documentation of previous experiences in the learning environment to plan their play (e.g., looks at a photograph of a block building from the day before and tries to recreate the building)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Plans to use multimedia documentation to record and extend their work in the learning environment</li> <li>• Reflects on accuracy of visual documentation (e.g., looks at a picture of a dinosaur and says, “I think they were even bigger than that.”)</li> </ul>

**Ways the educator might support the child’s development:**

- Encourage families to share photos and videos documenting the child’s experience and development at home
- Provide child with time to view image or object and reflect on related experience
- Record children’s dictation as they look at documentation of experiences
- Ask follow-up questions around child’s creations and utterances, focusing on having the child tell you more detail and expanding the story
- Include children in documenting learning; provide them with paper, pencils, journals, and cameras
- Provide opportunities for children to reflect on the documentation of their learning individually and in small and large groups.
- Use documentation as the basis for storytelling and curriculum planning
- Engage children in planning how to record experiences that are meaningful to them
- Support children in creating displays to share their learning with educators, families and peers
- Engage children in conversation about the accuracy of visual documentation

Over time, and with guidance and encouragement, children become increasingly capable of: **Creating and interpreting multimedia texts**

Child views, creates, and makes meaning of visual communication and multimedia documentation, which includes drawings, collections, photographs, videos and displays.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Views a slideshow of documentation from the learning environment and selects an image of an experience for further investigation</li> <li>Responds to the visual work of a peer using observations, comments, and questions</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Uses vocabulary, such as “audience” and “represent,” to discuss the work of a filmmaker</li> <li>Discusses an artist’s decision to use memory, imagination, or observation in their creation</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Identifies visual communication that is misleading</li> <li>Takes into consideration the aesthetic aspects of images, audio, and video related to their social and cultural meanings for an intended audience</li> </ul>

**Ways the educator might support the child’s development:**

- Identify museums and galleries to visit with children
- Invite children to use drawing as a way to look closely at sculptures
- Invite a visual artist or filmmaker to visit the classroom
- Create a slideshow of documentation from the learning environment and share it with children each Friday
- Find out about free or low-cost opportunities to see art in the community, and share these opportunities with families
- Support children in making connections between popular culture and their own multimedia work in the classroom
- Look at a block building from different heights and talk about ways to represent with different points of view (worm’s eye view, bird’s eye view, or child’s eye view)
- Invite a video editor to visit the class and ask them to explain the process of experimenting and editing with different tools to modify size, color, and shape for intended message
- Provide tools for children to make their own videos
- Support use of critical media literacy by provocations to discuss credibility and evidence
- Teach children to identify bias in media

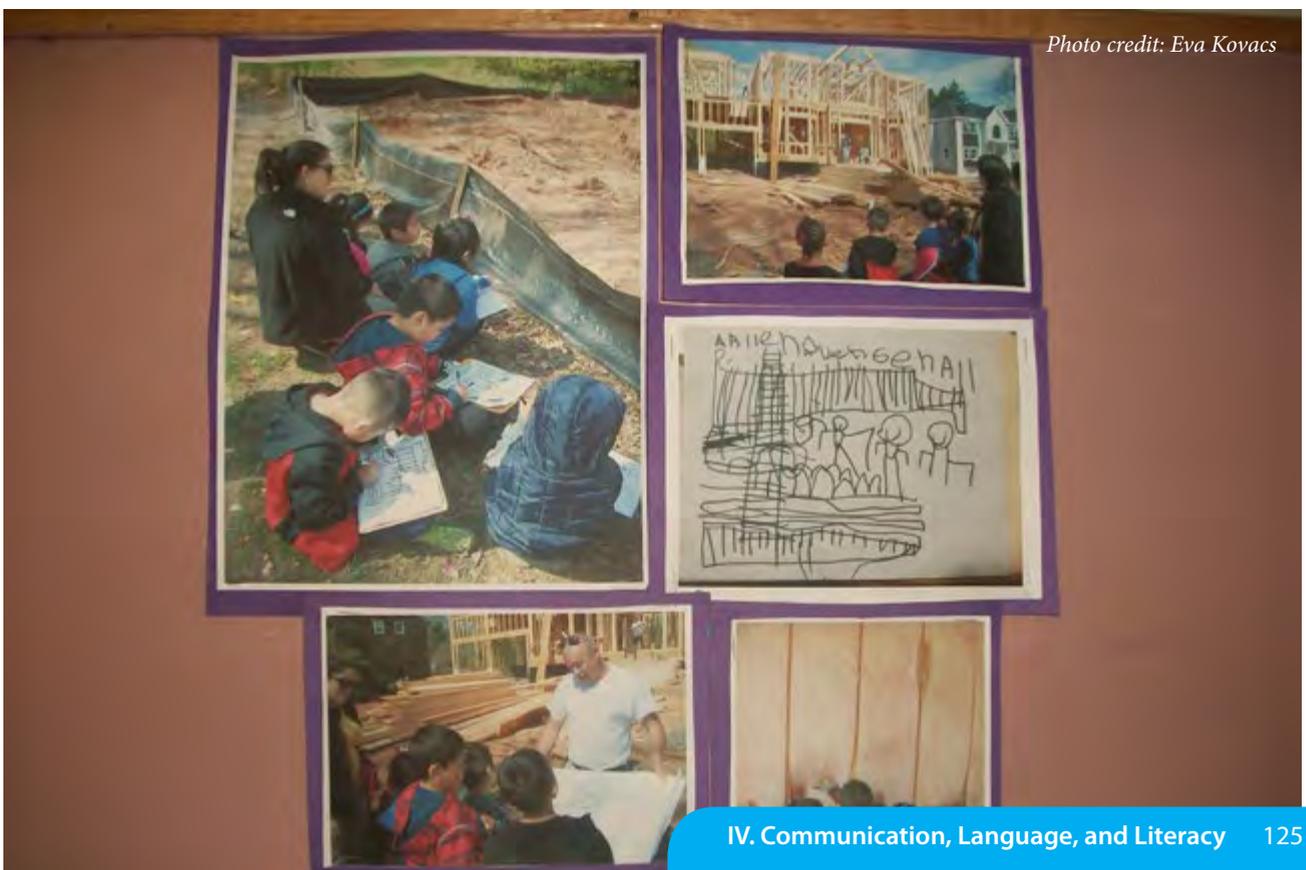


Photo credit: Eva Kovacs

# Communication, Language, and Literacy References

- American Speech-Language-Hearing Association. (2017). *Social communication benchmarks*. Retrieved from [https://www.asha.org/uploadedFiles/ASHA/Practice\\_Portal/Clinical\\_Topics/Social\\_Communication\\_Disorders\\_in\\_School-Age\\_Children/Social-Communication-Benchmarks.pdf](https://www.asha.org/uploadedFiles/ASHA/Practice_Portal/Clinical_Topics/Social_Communication_Disorders_in_School-Age_Children/Social-Communication-Benchmarks.pdf).
- American Speech-Language-Hearing Association. (2019). *Your child's communication development: Kindergarten through fifth grade*. Retrieved from <https://www.asha.org/public/speech/development/communicationdevelopment/>.
- California Department of Education. (2008). *California preschool learning foundations*. Sacramento, CA: Author. Retrieved from <http://www.cde.ca.gov/sp/cd/re/documents/preschoollf.pdf>.
- California Department of Education. (2009). *California infant/toddler learning & development foundations*. Sacramento, CA: Author. Retrieved from <http://www.cde.ca.gov/sp/cd/re/documents/itfoundations2009.pdf>.
- Colorado early learning and development guidelines. (n.d.). Retrieved from [https://earlylearningco.org/pdf/ELDG\\_Guidelines\\_English.pdf](https://earlylearningco.org/pdf/ELDG_Guidelines_English.pdf).
- González, N., Moll, L. C., & Amanti, C. (Eds.). 2005. *Funds of knowledge: Theorizing practices in households, communities, and classrooms*. Mahwah, NJ: Erlbaum.
- High Scope Educational Research Foundation. (n.d.). *Preschool child observation record*. Ypsilanti, MI: Author.
- Irving Harris Foundation Professional Development Network. (2012, updated 2018). *Diversity-informed tenets for work with infants, children, and families*. Chicago, IL: Irving Harris Foundation. Retrieved from <https://imhdivtenets.org/tenets/>.
- Morell, Z., & Medellin, C. (2018). *Core principles for supporting emergent multilingual learners (EMLLs)*. New York City Division of Early Childhood Education.
- Marotz, L., & Allen, E. K. (2015). *Developmental profiles: Pre-birth through adolescence*. (8th Ed.) Boston, MA: Cengage Learning.
- National Academies of Sciences, Engineering, and Medicine. (2018). *How people learn II: Learners, contexts, and cultures*. Washington, DC: National Academies Press.
- New York State Education Department. (2019, April 17). *New York State next generation English language arts learning standards*. Retrieved from <http://www.nysed.gov/curriculum-instruction/new-york-state-next-generation-english-language-arts-learning-standards>.
- Office of Head Start. (2015). *Head Start early learning outcome framework*. Washington, DC: U.S. Department of Health and Human Services.
- Office of Head Start. (2018). *Revisiting and updating the multicultural principles for Head Start programs serving children ages birth to five*. Retrieved from <https://eclkc.ohs.acf.hhs.gov/culture-language/article/multicultural-principles-early-childhood-leaders>.
- Quinn, J. M., Spencer, M., & Wagner, R. (2015). *Individual differences in phonological awareness and their role in learning to read*. In P. Afflerbach (Ed.), *Handbook of individual differences in reading: Reader, text, and context*. (80–92). New York, NY: Routledge.
- Samway, K. D. (2006). *When English language learners write: Connecting research to practice*. Portsmouth, NH: Heinemann.
- Wang, Xiao-Lei (2015). *Understanding language and literacy development: Diverse learners in the classroom*. Hoboken, NJ: Wiley-Blackwell.
- Washington State Department of Early Learning. (2012). *Washington State early learning and development guidelines: Birth through 3rd grade*. Olympia, WA: Author. Retrieved from [www.del.wa.gov/development/benchmarks/Default.aspx](http://www.del.wa.gov/development/benchmarks/Default.aspx).
- Wood, C. (2018). *Yardsticks: Child and adolescent development 4–14*. (4th Ed.). Turners Falls, MA: Center for Responsive Schools.
- Zero to Three. (2015). *Critical competencies for infant-toddler educators*. Washington, DC: Author. Retrieved from [www.zerotothree.org/resources/1197-zero-to-three-critical-competencies-for-infant-toddler-educators-related-professional-criteria#downloads](http://www.zerotothree.org/resources/1197-zero-to-three-critical-competencies-for-infant-toddler-educators-related-professional-criteria#downloads).
- Zero to Three. (2016, February 25). *Learning to write and draw*. Washington, DC: Author. Retrieved from <https://www.zerotothree.org/resources/305-learning-to-write-and-draw>.

# V. Cognitive Development

A. Understanding Stability and Change

B. Representing

C. Memory and History

D. Investigating and Exploring

E. Understanding Cause and Effect

F. Engineering

G. Math

1. Comparing and Categorizing

2. Number Sense and Quantity

3. Patterning

4. Spatial Sense and Geometry



*Photo credit: Justin Weiner*

## Cognitive Development

This domain encompasses the development of reasoning, problem-solving, and memory. Mathematical, scientific, and historical thinking are also included in this domain.

**Children begin learning at birth**, using all their senses combined with their ever-increasing motor skills to explore and understand their environment. The learning that occurs in the first months of life lays the foundation for concepts that educators will formally introduce later in childhood. For example, when an educator creates a predictable rhythm for a child's day, the child develops a sense of patterns. This learning lays the foundation for the child's ability to recognize and analyze numerical patterns, which is part of algebra.

**Responsive and predictable interactions** with loving educators are the most important way young children develop their cognitive skills. Educators may use the cycle of intentional teaching and learning described in the introduction of this book to make decisions about how to interact with children to extend their learning. Educators pause to **wonder** what children are learning about. They **observe** children's engagement with ideas and materials, and then **reflect** with children on what they noticed or figured out. Educators **respond** by making comments, asking open-ended questions, or providing new materials to extend children's thinking.

**Children learn through play.** Early childhood educators create schedules in which the majority of the child's day is spent in self-directed play and choose materials for play that will be interesting and engaging for children. Educators trust children to initiate and build on their own learning.

For example, one of the most important areas of cognitive development in early childhood is the understanding of object permanence. This understanding is described in the "Stability and

Change" sub-domain. In infancy, children begin to understand that when an object is out of their sight, it has not disappeared altogether. The baby wonders about, plays with, and explores this concept through peek-a-boo and hide-and-seek games. The educator supports their understanding by providing boxes that the toddler can put things in and pull things out of. The educator provides time for the child to do this over and over again, knowing that this play builds the child's understanding that the world is a reliable and predictable place. Children in the preschool and primary grades have mastered the concept of object permanence. However, they continue to explore concepts related to stability and change, such as melting and evaporation, through play.

Intentional interactions in a play-based environment support the development of children's mathematical understanding. Children begin to internalize ideas about quantity and numeracy as they stack blocks and put one teddy bear in each toy bed. As they play, educators respond by introducing math vocabulary such as "more," "less," and "equal." As children get older, they express their understanding with written numbers and symbols, but they continue to benefit from access to math materials that they can manipulate to support their conceptual understanding.

Young children represent their thinking in many creative ways. Some children love to act their ideas out in dramatic play, others draw, some sing, and others build small worlds with blocks as figures. As children's language develops, their ability to represent their thinking symbolically in a play-based setting develops as well. Young children often have a mode of representing that they strongly prefer. In order to facilitate the development of children's cognitive skills, early childhood educators create ample opportunities for children to represent their thinking in their preferred ways.

## V. COGNITIVE DEVELOPMENT

# A. Understanding Stability and Change

Child recognizes and develops the ability to explain how material objects change and how they remain stable.



*Photo credit: Justin Weiner*

## Over time, and with guidance and encouragement, children become increasingly capable of: **Understanding Stability and Change**

Child recognizes and develops the ability to explain how material objects change and how they remain stable.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• When something is dropped and make a sound, looks towards that sound</li> <li>• Looks for educator after they step out of the room</li> <li>• Looks for or orients toward a pacifier that they have just dropped</li> <li>• Finds a rattle that is hidden under a blanket when only part of the handle is showing</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Tests the stability of physical objects, for example, patting, banging, reaching inside, and sitting on an empty box</li> <li>• Looks for a toy that has been hidden under a blanket</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses a variety of strategies to find missing people or objects, including looking in multiple locations for things that have been missing for some time</li> <li>• Waits or watches at window for the return of a family member</li> <li>• Thinks that they may go down the toilet or bathtub drain</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Is curious about physical objects that appear to be stable but whose properties change, such as ice and sand</li> <li>• Reacts to puppets and adults in costume as if they were real</li> </ul>

### Ways the educator might support the child’s development:

- Play peek-a-boo with the child
- Partially cover a familiar object with a cloth or blanket and ask, “Where Is It,” showing excitement when the child uncovers the toy
- Carry the child to look for familiar people, toys or pets, asking, “Where Is...”
- Read books like *Where’s Spot?* and encourage the baby to lift the flaps; share in the baby’s excitement
- Sing “Where is Thumbkin?” while slowly revealing your hands and fingers and then folding them away
- Play with a Jack-in-the-Box alongside the child (Note: sometimes children do not readily accept this toy.)
- Give the child a box large enough for them to climb in and out of so that they can be “Jack.”
- Play a simplified version of hide-and-seek using sounds to help the baby find you; repeat the game by having the baby hide
- Set up activities such as mixing color stations or watercolors over ice cubes to show how things change properties
- Plant bean or grass seeds and watch them grow
- Notice and respect children’s feelings about puppets and costumes

## Over time, and with guidance and encouragement, children become increasingly capable of: **Understanding Stability and Change**

Child recognizes and develops the ability to explain how material objects change and how they remain stable.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Hides own eyes but leaves parts of their body exposed while playing hide-and-seek</li> <li>• Uses phrases to initiate and identify make-believe play with others (“Let’s pretend…” or “I was just pretending!”)</li> <li>• Asks about the permanency of their gender and racial identity (e.g., “Will I always be a boy/girl? Will I always have my skin color?”)</li> <li>• Offers magical explanations for change (e.g., says that a fairy puts the moon in the sky every night)</li> <li>• Uses language about death, without necessarily thinking it is a permanent state</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Plays hide-and-seek, fully hiding body, but laughing or otherwise staying in touch with playmates through sound</li> <li>• Plays with their shadow, trying to step on it or get away from it</li> <li>• Has difficulty imagining that their adult family members were once children</li> <li>• Investigates the permanence of death through observation of insects and animals and in dramatic play; will ask questions about where the insect or animal may go</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Begins to understand death as a biological event</li> <li>• Begins to understand how the body functions to sustain life</li> </ul>

### Ways the educator might support the child’s development:

- Ask follow-up questions to children’s magical explanations of how things change (e.g., “Tell me more about that.” “What makes you think that?”)
- Encourage child to draw or paint a picture to express their thoughts or feelings about change
- Gently clarify when children suggest that a dead person or animal will come alive again; use simple language
- Provide concrete examples of changes that occur.
  - » Document the growth of a caterpillar into a butterfly
  - » Collect different colored leaves (green, red, and brown)
  - » Watch a pumpkin decompose
  - » Trace their shadows at different times of the day
  - » Observe patterns of change in weather conditions, daily and seasonally
- Allow the children to have a ceremony when a classroom pet has died; answer their questions about death factually
- Include non-fiction books about life cycles in the learning environment
- Include simple biological information in discussion of death (“Their heart has stopped beating. They are not coming back.”)

## Over time, and with guidance and encouragement, children become increasingly capable of: **Understanding Stability and Change**

Child recognizes and develops the ability to explain how material objects change and how they remain stable.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• May be anxious about death</li> <li>• Discusses the physical changes that accompany age</li> <li>• Can imagine their adult family members growing old</li> <li>• Compares the life cycles of different organisms (e.g., says that people live longer than dogs)</li> <li>• Becomes conscious of time, but is not yet able to tell time on the clock (“Is it three o’clock? My grandma is coming to get me.”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Discusses what happens to the body after death</li> <li>• Understands the patterns of the days of the week and the months of the year</li> <li>• Asks questions about the properties of materials (e.g., “What is the air made out of?”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Start to understand how ecosystems can change quickly (a storm) or slowly (a pond becoming a meadow)</li> <li>• Combines and separates mixtures in sophisticated ways (e.g., uses a series of strainers to separate out the pebbles and silt in river water)</li> </ul>

### Ways the educator might support the child’s development:

- Include books in the learning environment that help children understand death
  - » *And So It Goes*, by Paloma Valdivia
  - » *Goodbye Mog*, by Judith Kerr
  - » *The Goodbye Book*, by Todd Parr
  - » *Ida Always*, by Caron Levis and Charles Santoso;
  - » *The Dead Bird*, by Margaret Wise Brown
- Read non-fiction books about the life cycles of familiar animals (such as cats, dogs, and other animals that children see in their communities); explore rituals and routines for having pets and for pet deaths
- Talk to family members about their beliefs about death and how they would like to explain death to the child
- Talk to children about the inevitability of the life cycle, and how it applies to everything that is alive
- Observe food as it turns to compost; discuss how it changes
- Create opportunities for children to explore stability and change in local contexts
  - » Visit a local watershed to study water quality
  - » Look at photos of the local area in years past in comparison to today
- Ask about characters in chapter books (“How do they change over the course of the story? Why do they change? What is the same about them throughout?”)



Photo credit: Justin Weiner

## V. COGNITIVE DEVELOPMENT

# B. Representing

Child uses symbolic thought to represent.



*Photo credit: Shannon Taggart*

Over time, and with guidance and encouragement, children become increasingly capable of: **Representing**

Child uses symbolic thought to represent.

0–9 months	8–16 months	15–24 months	24–36 months
	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Rolls a toy car back and forth on the floor</li> <li>Uses two objects that go together to pretend (e.g., puts a spoon in a bowl and stirs)</li> <li>Uses a bottle and pretends it contains a favorite drink (e.g., “leche”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Substitutes similar objects in dramatic play (e.g., uses a block as a phone)</li> <li>Imitates a few steps of adult behavior in dramatic play (e.g., puts doll in bed and says, ‘night-night.’)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Uses objects flexibly for symbolic play (e.g., a stick becomes a spoon then a wand; a box is a boat then a house)</li> <li>Animates and interacts with objects (puppets, toys, sticks, or dolls) as characters who speak aloud and have feelings</li> <li>Talks to self during dramatic play even when no play-mates are around</li> <li>Completes a series of actions related to a theme in dramatic play, such as listening to a doll’s heart, then giving the doll a shot and a bandage</li> <li>Makes marks on paper and says they represent something (“I drew Mommy.”)</li> </ul>

**Ways the educator might support the child’s development:**

- Provide materials for the child to imitate caregiving routines
  - » Doll stroller
  - » Brush or comb
  - » Bottle
- Play games with a script (“Where is Mommy?” “There is Mommy!” “Where is baby?” “There is baby... there you are!”)
- Talk with families about the way they use storytelling, song, theater, and art in their home and community
- Make play dough with the child and use household objects such as wooden spoons or cookie cutters
- Use music to enhance the telling of stories
- Provide fabrics and props for the child to use in dramatic play so they can create scenarios
- Encourage child to talk about or point to specific parts of their drawings, paintings, and sculptures by saying, “Tell me about your...” or “Oh, you are pointing at a red tree!”

## Over time, and with guidance and encouragement, children become increasingly capable of: **Representing**

Child uses symbolic thought to represent.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Assigns peers, adults, or objects roles as characters in play</li> <li>• Plans with other children what they are going to pretend before starting to play (e.g., “Let’s play doggies!”)</li> <li>• Uses objects to make arrangements and represent a storyline; may repeat the story over and over again (e.g., uses blocks to make a house, then uses a toy fire truck to put out a fire in the house)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Constructs and experiments with longer, complicated storylines in dramatic play</li> <li>• Invents storyline and initiates play with a peer (e.g., “Are you coming to my restaurant? Can I take your order?”)</li> <li>• Negotiates roles with peers (e.g., “I’ll be the papa and you are baby bear.” “NOOO. I’m the sister bear. And you are my brother.”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Adds details from a scene to its visual representation (e.g., the landscape or the weather)</li> <li>• Differentiates fantasy from reality</li> </ul>

### Ways the educator might support the child’s development:

- Ask child what would help further their play, such as what other materials they could use to represent something
- Read familiar stories such as *The Three Billy Goats Gruff* many times and encourage the child to act it out
- Reflect with children about their dramatic play, and talk about the different roles in a family, while being mindful of different kinds of families and cultural differences; what does it mean to the child to act like a mommy, daddy, aunt, grandma, or other family member?
- Invite families to visit the class to share a folktale or family story
- Encourage the child to add details; for example, build a fort to represent an animal’s home, and then discuss what would be needed in the fort to make it more cozy
- Support the development of children’s understanding of gender roles in representation (“What does it mean to look like a girl? Does a girl have to look like that?”)
- Observe and reflect on children’s dramatic play; consider what background knowledge they are drawing on
- Offer large pieces of materials to be used in different ways, as well as costumes that suggest a role: worker’s hats (hard hat, bus drivers’ hat), vest and suit jackets, dresses, a doctor’s kit
- Ask the child, “What story are you telling?” in their drawing or construction
- Write or help children write a story based on what they drew, acted out, or built

## Over time, and with guidance and encouragement, children become increasingly capable of: **Representing**

Child uses symbolic thought to represent.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Assigns roles and acts out scenes from the economy (e.g., child dramatizes a farmer's market and has peers work at different stalls and be customers)</li> <li>• Uses art to reflect on their experiences (e.g., uses musical instruments to make a song about an experience they had)</li> <li>• Shares stories and symbols from their own families and cultures</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Represents specific details from architecture in their constructions</li> <li>• Plans artistic representation with peers (e.g., child writes a story with friends and then makes puppets and scenery to dramatize the story)</li> <li>• Experiments with different forms of representation they have learned about through media and trips to cultural institutions (e.g., child attends a field trip to see Balinese shadow puppets and then experiments with creating shadow puppets themselves)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses research to add realistic details to their representations (e.g., researches costumes from the past to create a dramatization of the life of a historical figure)</li> <li>• Describes systems for symbolic thinking from the past, such as hieroglyphs</li> </ul>

### Ways the educator might support the child's development:

- Ask families about cultural or religious prohibitions to representation; create a welcoming and inclusive learning environment
- Invite children to use collage materials to make dollhouses out of cardboard boxes and make characters to inhabit the dollhouses
- Sing songs with space for children's contributions and allow them to write new verses
- Create visual art while listening to different types of music
- Invite families to share modes of artistic expression from their family, community, or culture
- Make paper dolls of historical figures; use cloth and scissors to clothe the dolls in historical costumes
- Act out stories that the children write
- Sing songs, such as:
  - » "I Had a Rooster"
  - » "The Cat Came Back"
  - » "The Foolish Frog"
- Notice the particular forms of representation that are motivating for different children
- Encourage children to use art to represent their feelings
- Invite families to join children in creating
- Welcome families to celebrate children's creations
- Challenge children to create models of villages, replicating complicated architectural details



Photo credit: Sherry Cleary

## V. COGNITIVE DEVELOPMENT

# C. Memory and History

Child develops the ability to store, retrieve, and share information about past experiences.



## Over time, and with guidance and encouragement, children become increasingly capable of: **Memory and History**

Child develops the ability to store, retrieve, and share information about past experiences.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Can anticipate familiar activities (e.g., kicking legs and cooing when shown bottle, nipple, or spoon before feeding)</li> <li>• Turns toward the front door after hearing the doorbell ring</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Remembers information about recent event (e.g., continuing to play peek-a-boo after caregiver has stopped playing)</li> <li>• Uses gestures or single words for a family member after morning drop-off (e.g., going to the door and saying, “Mama?”)</li> <li>• Imitates actions that they have observed in the past (e.g., watching caregiver blow on hot food before eating, then blowing on own food—hot or cold)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Knows where familiar objects are stored (e.g., looks at the shoe bin when educator says, “We’re going for a walk, where are your shoes?”)</li> <li>• Gives another child an object that belongs to them</li> <li>• Acts out caregiving sequences within dramatic and pretend play (e.g., breastfeeding a doll and then pretending to burp it)</li> <li>• Anticipates, acknowledges, and participates in the steps of caregiving routines (e.g., after eating says, “All Done. Wash Hands”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Recreates experiences in dramatic play (e.g., after going to the grocery store, pretends to put food in a cart and check out)</li> <li>• Tells about a significant event they remember from the past, such as a time they jumped in a big puddle</li> <li>• Shares information about recent experiences with trusted adults (e.g., telling a family member about the bee at the school playground)</li> </ul>

### Ways the educator might support the child’s development:

- Keep daily schedule constant, while also responding to everyday needs; talk to the infant about what may be happening next
- Verbally express when the infant is gazing at a certain object, such as a door after their caregiver has left (“Oh, I see you looking at the door. I bet you are looking for your Mama. She will return after naptime.”)
- Create opportunities for repetitious play so that the child will say, “again,” and be willing to play the same game repeatedly
- Have designated places to put things; include pictures on the shelves to remind children where objects go
- Document everyday play in pictures and create photo albums or displays at child level; spend time talking with children about the pictures
- At pick-up, talk to families about the child’s activities with the child present so that the family may extend the conversation after school
- Observe the child’s dramatic play and help them make connections (“You are pretending to feed your baby just like mommy does with your sister.”)
- Use songs, chants, and verbal cues to help children learn what comes next in caregiving routines
- Provide the child with photographs or objects to bring home to inspire family conversations about what the child did at school
- Discuss previous events if the child brings them up, such as a trip to the grocery store or a bus ride to school
- Provide props so that the child may reenact their experiences
- If multiple children are remembering a past experience, acknowledge each story, but also point out details such as the time of day, or who they were with

## Over time, and with guidance and encouragement, children become increasingly capable of: **Memory and History**

Child develops the ability to store, retrieve, and share information about past experiences.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses time-related words and concepts (e.g., first/last, morning/night, yesterday/today), though not always accurately</li> <li>• Although the child’s birthday was a month ago, they may describe looking forward to their birthday, which they tell an educator “is coming soon.”</li> <li>• Uses phrases that suggest awareness of the past (e.g., “When I was a baby…”)</li> <li>• Identifies changes in themselves over time (“I’m bigger now. I don’t wear diapers anymore.”)</li> <li>• Retells a simple story or event in roughly sequential order (“Gabby took my soccer ball. I took it back. That’s why she’s crying.”)</li> <li>• In dramatic play, reenacts everyday experiences and events from books, television, or observations</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Reenacts multiple sequential scenes from personal experience, books, and media</li> <li>• Includes specific details of events when recreating them (e.g., pretending to add turmeric and paprika when cooking in the sand box)</li> <li>• Knows significant events from their family history (e.g., “Abuelito came from the Dominican Republic.”)</li> <li>• Describes significant changes in their own lives over time (e.g., “I used to live with my Auntie. Now I live in Mommy’s house in Buffalo.”)</li> <li>• Understands that things were different a very long time ago, but is unsure how long ago this was (e.g., “When grandma was little, were dinosaurs alive?”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Retells an important life event in sequential order (e.g., draws a picture about something they did during summer vacation)</li> <li>• Believes that they can remember much more than they really can</li> <li>• Describes how memory works (e.g., says, “It’s easier to remember something that happened yesterday than something that happened last month.”)</li> </ul>

### Ways the educator might support the child’s development:

- Invite families to share photographs of the child when they were younger, or of past family events; use these photographs to have conversations with the child about their memories
- When recounting events, use visual representation
  - » Artifacts, such as a ticket
  - » Art made by the child
  - » Photographs related to the experience
  - » Natural objects, such as shells or leaves
- Observe and reflect on children’s dramatic play; what personal histories are they re-enacting?
- Invite children to use drawing and dictation to tell about recent experiences
- Create a schedule of the day and support discussion about what comes first and what comes next during the day, as well as what usually happens on what days of the week
- Support the child in making a timeline of their life
- Write a book, *About my Life*, with pages of stories about what happened when they were a baby, a toddler, and more recently
- Draw a picture of what life was like at a different time, such as before a sibling was born or before they moved

## Over time, and with guidance and encouragement, children become increasingly capable of: **Memory and History**

Child develops the ability to store, retrieve, and share information about past experiences.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Begins to understand that history describes the collective memories of people and events from other times and places</li> <li>• Asks questions of elders about how life was different in the past</li> <li>• Shares significant events from their own family history with peers</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Groups items they have to remember into easy-to-remember categories (e.g., animals, foods, shapes)</li> <li>• Begins to identify which events happened long ago and which happened in the more recent past</li> <li>• Starts to make connections between how history has shaped our present experience (e.g., "My friends and I can swim at the same pool because of Martin Luther King, Jr.")</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Intentionally selects and uses organizational strategies to remember information</li> <li>• Uses language to describe chronology, such as "decade" and "century"</li> <li>• Uses resources such as books and websites to organize information into a chronological sequence</li> <li>• Connects their family history to broad historical events</li> <li>• Identifies changes over time in their community</li> </ul>

### Ways the educator might support the child's development:

- Include books in the learning environment that tell stories from history
  - » Histories of the children's national and cultural groups (e.g., history of Taino people)
  - » Biographies (e.g., Obama, Lincoln)
  - » Stories of historical events (e.g., The March on Washington)
  - » Descriptions of life at different periods of history (e.g., prehistoric man)
  - » Invite elders to the classroom to talk about their memories
- Research the histories of the national and cultural groups of the children in the class, and be prepared to weave examples from these groups into discussions of history
- Invite each child to contribute to a timeline of a time period that includes now
- Sing songs that touch on history
  - » "If I Had a Hammer"
  - » "If You Meet Me at the Back of the Bus"
  - » "Fillimiooriay"
- Use self-talk to describe strategies for organizing information to make it easier to retrieve
- Ask children to write from perspectives of figures they have read and learned about. (What was it like to be a knight's horse, for example?)
- Welcome children to link their family histories to larger discussions of historical events



## V. COGNITIVE DEVELOPMENT

# D. Investigating and Exploring

Child becomes a scientific thinker by manipulating objects, asking questions, making observations and predictions, and developing generalizations.



*Photo credit: Justin Weiner*

## Over time, and with guidance and encouragement, children become increasingly capable of: **Investigating and Exploring**

Child becomes a scientific thinker by manipulating objects, asking questions, making observations and predictions, and developing generalizations.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Child uses senses (sight, smell, touch, hearing, taste) to interact and gain information about people and environment</li> <li>• Explores objects with hands (grasping object) and mouth (bringing object to mouth)</li> <li>• Expresses a sense of wonder about their surroundings (e.g., looks at an object or person intently)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Brings familiar or new objects they are curious about to a trusted adult</li> <li>• Laughs at unexpected events, such as when a ball they have rolled up an incline begins to roll back</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Investigates new phenomena (e.g., when walking past a pile of leaves, stops and feels them with their hands)</li> <li>• Is curious about items that appear in nature, such as worms, moss, and puddles</li> <li>• Repeats experiences</li> <li>• Points to objects and signals to ask what they are</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Makes guesses about what might happen next based on previous experiences (e.g., pushes doorbell and waits for someone to come to the door)</li> <li>• Asks simple questions about the natural world (e.g., asks “Where did the rainbow go?” or “Why is it wet outside?”)</li> </ul>

### Ways the educator might support the child’s development:

- Talk to the child as they look around. (“Yes, I see you looking at the teddy. Here you go, you can feel and hold the teddy.”)
- Offer the child objects, name and describe them, and invite the child to inspect the object with hands, eyes, and mouth
- Describe the environment as being rich in sensory experiences (e.g., “Do you feel the sun? Is it warm on your face? Can you see the light? The lights are sparkling.”)
- Identify and create safe spaces and places for exploring new and different experiences
- Invite children to manipulate objects and feel their texture, weight, and size; this can include pine cones, rocks, leaves, and feathers, for example
- Join the child in paying attention to sights, sounds, smells, and textures
  - » Listen to the birds together
  - » Smell the hotdog stand
  - » Feel the breeze while swinging
- Bring in natural items, such as bird nests, feathers, and different types of soil
- Provide time for children to investigate objects and experiences during community walks
- Value repetition of experiences as a form of scientific inquiry
- Engage in multi-sensory activities that invite investigation
  - » Cooking in the classroom
  - » Mixing and stirring natural materials in buckets
  - » Walks in the neighborhood, woods, or park
  - » Floating scarves in the wind
  - » Freezing objects in ice and watching them thaw
  - » Digging holes
- Ask “wh” questions, such as “What is that?” “Who is that?” “What if...?” “What do you think?” and “What happened?”
- Listen to children’s questions and provide descriptive answers

## Over time, and with guidance and encouragement, children become increasingly capable of: **Investigating and Exploring**

Child becomes a scientific thinker by manipulating objects, asking questions, making observations and predictions, and developing generalizations.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Experiments with mixing different materials together (e.g., sand and water)</li> <li>• Asks many “why” questions (e.g., “Why do we have to put our jackets on?”)</li> <li>• Makes simple predictions (e.g., says they think the water in the sprinklers will be cold today)</li> <li>• Observes and wonders (e.g., watches a turtle and asks, “Why is it hiding inside? When is it coming out?”)</li> <li>• Applies their knowledge to understand observations (e.g., watches a snail and asks, “Which part are the eyes?”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses feelings and imagination to understand the results of a science experiment (e.g., “Maybe the caterpillar just felt like becoming a butterfly.”)</li> <li>• Uses sources other than the adult to gather information, such as books and peers</li> <li>• Brainstorms solutions based on background knowledge (e.g., “Be quiet so the birds will come!”)</li> <li>• Asks a series of questions about their observations (e.g., when observing a worm on the sidewalk the child asks, “Where did it come from? Why doesn’t it have eyes? How will it find its way home to its family?”)</li> <li>• Asks “why?” but then rejects answers not to their liking</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Asks “how” things were made (e.g., “How does a pigeon build a nest?”)</li> <li>• Generates ideas about how to find the answers to their questions (e.g., when wanting to learn more about trucks, the child decides to ask a family member who drives a truck)</li> <li>• Lists materials needed for an experiment</li> <li>• Records information from an experience (e.g., drawing, writing, storytelling, photographing)</li> </ul>

### Ways the educator might support the child’s development:

- Add natural materials, such as smooth stones or pieces of wood, to different centers
- Conduct simple baking experiments with small groups, such as making muffins or quesadillas
- Ask prediction questions (“What will happen to the flour when the milk is poured in?”)
- Provide access to a sand and water table on a daily basis, and encourage children to mix the substances together
- Use eye droppers to drop different colored oil into water to see what happens
- Acknowledge that when children are asking “why” questions they are not questioning your authority, but needing additional information and trusting you to give it
- When a child asks a question, encourage the group to hypothesize what the answer may be; chart their responses and invite them to explain their thinking
- Show children how to look for the answer to a question in a book or online
- Provide opportunities for children to use polls (“Do you think it will rain today?” “Which item will weigh more—a book, a leaf or a pencil?”)
- Make big graphs to capture this “data” so that children can see and interpret it
- Provide tools to explore the environment (magnets, magnifying glasses, light table)
- Model the use of scientific vocabulary
- Ask children to record observations of particular objects and outside scenes such as a cityscape, a tree, a garden
- View wrong answers or explanations as theories in development
- Ask for predictions about observable phenomena (“How do the apples get soft when we make apple sauce?”)
- Provide unique pictures, such as X-rays or close ups of butterfly wings and snowflakes

## Over time, and with guidance and encouragement, children become increasingly capable of: **Investigating and Exploring**

Child becomes a scientific thinker by manipulating objects, asking questions, making observations and predictions, and developing generalizations.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses non-fiction books to find answers to questions</li> <li>• Develops hypotheses (e.g., If a hermit crab prefers a particular shell, the child says, "I think it's because he has more room to grow in there.")</li> <li>• Describes a strategy for finding out if their hypothesis is true</li> <li>• Uses prior knowledge to make generalizations about what might happen (e.g., The child says, "Fruits grow on trees, so I think if I plant this orange seed, a tree will grow.")</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Seeks scientific solutions that are rational and consistent and that work in similar situations</li> <li>• Plans simple experiments (e.g., child builds spinning tops and hypothesizes that a wide top will spin for a longer period of time than a flat one)</li> <li>• Observes changes in living organisms and the natural environment over time (e.g., independently checks corn plants every morning to see how they are growing)</li> <li>• Works with peers to collaboratively plan experiments</li> <li>• Compares their observations to those of their peers</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Compares their observations with observations in books and websites</li> <li>• Poses specific questions and then seeks to answer them through research, experiments, and observations (e.g., child wonders how to make a brick and then reads about the topic and mixes various combinations of materials to see which make the best bricks)</li> <li>• Identifies and interviews experts to find out the answers to their questions</li> <li>• Reviews data recorded in tables over several days to draw conclusions</li> <li>• Starts to understand observations as components of systems (e.g., solar system, digestive system) and identifies individual parts and how they work together</li> </ul>

### Ways the educator might support the child's development:

- Use photography to gather observations over time; for example, observe a tree through several seasons or watch a pumpkin over the weeks around harvest, and ask children to come up with theories about why changes occur
- Ask children to do research by looking in books for answers to their questions
- Question the child's reasoning to explore their thought process, but without concern for correctness ("What makes you think that? How did you figure that out?")
- Provide sketchbooks to record natural phenomena, and make predictions; for example, ask children to draw a seed as they plant it, then when it has sprouted, and as a plant growing over time
- Invite children to document their observations in a variety of ways (charts, notes, or graphs, for example)
- Invite families to share areas of expertise with the class
- Support children in generating questions for research
- Provide graphic organizers so that children are able to successfully complete a multiday investigation
- Create role models for children
  - » Visit scientists at work
  - » Read about scientists who changed history
  - » Ensure representation of women and members of non-dominant racial, linguistic, and cultural groups



Photo credit: Shannon Taggart

## V. COGNITIVE DEVELOPMENT

# E. Understanding Cause and Effect

Child understands and explores the causes and effects of actions and events.



## Over time, and with guidance and encouragement, children become increasingly capable of: **Understanding Cause and Effect**

Child understands and explores the causes and effects of actions and events.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• After dropping an item, looks for or turns body toward item</li> <li>• Acts on an object to make a pleasing sight, sound, or effect (e.g., shakes rattle to make sound)</li> <li>• Moves body in a rocking motion in order to get the educator to keep rocking them</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Watches for reactions from other people when an event has occurred, such as an adult answering the phone when it rings</li> <li>• Repeats actions many times to cause an effect, such as dropping an object for a caregiver to pick up</li> <li>• Puts objects into a container, turns it over, watches the objects fall out, and then fills it up again</li> <li>• Approaches objects with an intent to cause a certain effect (e.g., pats a drum, twists a knob, turns on a light switch)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Examines toy if it is not producing the desired effect, or tries new ways to manipulate toy</li> <li>• Knows that playing with certain forbidden objects will get adult’s attention</li> <li>• When radio is turned on, says, “Dance, Mama.”</li> <li>• Builds a tower of big cardboard blocks and then knocks it down to watch it fall</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Says, “She needs her blanket,” when a peer becomes upset</li> <li>• Says “shhh” and tiptoes when a child is still sleeping</li> <li>• When a child has a Band-Aid, other child points at it and asks what happened</li> </ul>

### Ways the educator might support the child’s development:

- Imitate the baby’s laughter, singing, smiling, and squealing to show that their action produces a reaction
- Position the baby so their kicking and grasping can produce a response
- Provide a variety of interesting objects for the baby to touch, hold, bang on, and throw
  - » Various rattles
  - » Bells
  - » Small and large drums
  - » Boxes
  - » Balls
- Respond to the baby’s efforts to create an effect; for example, if the baby raises their hand to be picked up, say, “You are raising your arms to show me you want to be carried. I’m going to pick you up now.”
- Respond promptly to the child’s efforts to initiate an interaction, for example, if the child makes eye contact with the educator and then covers their eyes, the educator may say, “You want to play peek-a-boo.”
- Push children on a swing so the motion of going away and coming back supports their developing sense of prediction
- Help the toddler understand the effects of their actions on others (“The baby is smiling because you are talking to her.”)
- Provide cause and effect toys and experiences, such as water and sand, toys that sink and float, ramps and toys with wheels
- Provide materials that encourage children to explore cause and effect
  - » A ramp to roll objects down
  - » Cardboard rolls to push objects through
  - » Push and pull toys
  - » Pinwheels
  - » “Busy boxes” that have various buttons and latches on each side
- Narrate what may be happening during an event that the child is curious about
- Use the phrases, “I wonder…” and “Let’s see what happens if…”
- Allow child plenty of time and repetition to explore an event or item; add materials to extend learning such as different size balls to roll down a ramp

## Over time, and with guidance and encouragement, children become increasingly capable of: **Understanding Cause and Effect**

Child understands and explores the causes and effects of actions and events.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Asks “why” questions to show effort at understanding causation</li> <li>• Explains the effects that simple actions have on objects. (“It will be dark when you turn out the light.”)</li> <li>• Sees themselves at the center of causation (“I have my own moon. I bring it with me wherever I go.”)</li> <li>• Offers magical explanations of causes (“The frost fairy came in the night and turned the grass white.”)</li> <li>• Assigns human characteristics to inanimate objects (“The leaves fell off the tree because the wind told them to.”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses clues and background knowledge to find causes (“She’s wearing a coat so it must be cold outside.”)</li> <li>• Identifies objects or conditions that affect other objects (“The food coloring makes the water blue” or “The cold turned the water to ice.”)</li> <li>• Makes predictions, sometimes using unrelated information (“I think the gold car will win. Gold is for winners.”)</li> <li>• Uses the word “because” to show relationship between past and future events</li> <li>• Distinguishes between some magical and scientific causes, but still believes in magical causes</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Predicts an outcome based on previous effects they have observed (“If we leave the seeds on the top of the dirt, the birds will come eat them.”)</li> <li>• Seeks but does not readily accept scientific causes for things</li> </ul>

### Ways the educator might support the child’s development:

- Encourage children to explain their thinking about magical causes without correcting them
- Engage families in observing and recording their children’s poetic descriptions of causes
- Offer simple experiments that develop children’s understanding of cause and effect
  - » Color mixing
  - » Ramp play
  - » Objects frozen in ice
- Engage children in extended back-and-forth conversations about the reasons for things
- Use phrases such as
  - » What do you think will happen when...?
  - » What happened last time?
  - » What made that happen?
  - » Why do you think that?
- Observe and record children’s hypotheses about causes, and revisit predictions with children to reflect on how their thinking has changed over time
- Provide materials and opportunities to observe cause and effect
  - » Blocks
  - » Marble runs
  - » Gears
  - » Paints
  - » Planting
  - » Powders for mixing
- Ask children “what if” questions
  - » What if we took the bottom block out first?
  - » What if we add more water to the corn starch mixture?
  - » What if we add more red to the purple color paint you mixed?

## Over time, and with guidance and encouragement, children become increasingly capable of: **Understanding Cause and Effect**

Child understands and explores the causes and effects of actions and events.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Believes their own theory about the cause of an event, regardless of the evidence</li> <li>• Discusses how rules impact people and the environment (e.g., recycling)</li> <li>• Reflects on how some actions can help others feel better (e.g., cheering up a sad friend by sharing their snack)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Designs experiments that will prove their previously held beliefs about causes, rather than objective experiments</li> <li>• Describes choices people make based on availability of resources (e.g., talks about how lack of food causes migration)</li> <li>• Asks questions about how things change over time</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Demonstrates understanding of how humans have affected the environment and how actions and rules are adopted to protect the environment</li> <li>• Discussing the purpose of tools (e.g., how windmills produce clean energy)</li> </ul>

### Ways the educator might support the child’s development:

- Ask children why the water in a clear or open container left on the heater or windowsill diminishes over a few days
- Plant beans in a plastic bag lined with a wet paper towel; ask why some grow and some do not
- Engage in group conversation about children’s theories of causation
- Analyze choices people made in creating the built environment (e.g. ‘Why did engineers choose to build a vertical lift bridge here?’)
- Create opportunities for children to see how changing certain factors causes a predictable change in outcome
- Teach children about climate change and engage the class in analyzing and reducing the group’s use of carbon.



Photo credit: Sherry Cleary

## V. COGNITIVE DEVELOPMENT

# F. Engineering: Problem-solving with Materials

Child plans and uses hands, tools, and technology to solve problems with materials.



## Over time, and with guidance and encouragement, children become increasingly capable of: **Engineering: Problem-solving with Materials**

Child plans and uses hands, tools, and technology to solve problems with materials.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Reaches for an object that has rolled far away</li> <li>• Uses a trusted caregiver as a tool to solve a physical problem (e.g., child watches the educator wind up a music box and, when the music stops, touches their hand to get them to make it start again)</li> <li>• Shakes and bangs materials to make a sound happen repeatedly</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses objects as a means to an end (e.g., uses a bucket to transport blocks from one room to another)</li> <li>• Crawls around a chair to get an object that has rolled behind it</li> <li>• Keeps turning a container around to find the side with the lid or opening</li> <li>• Attempts to unscrew lids to get objects out of them</li> <li>• Undoes materials such as fasteners on shoes or tape on surfaces</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses adult as a resource to solve problems with materials (e.g., child hands a toy car to an educator after it stops moving, and the child cannot figure out how to make it move again)</li> <li>• Uses trial and error to solve problems with materials (e.g., tries different orientations of a three-piece knob puzzle before fitting the pieces in place)</li> <li>• Imitates a problem-solving method they have previously observed an adult use (e.g., going to the door and turning the knob to try to open it)</li> <li>• Uses an object to reach another object (e.g., uses the handle of a broom to get an object stuck under the couch)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Intentionally selects objects to use as tools in play (e.g., chooses a thick stick over a thin one to use as a “spoon” to stir mud in make-believe soup)</li> <li>• Puts a circular piece into a puzzle without having to try the other areas</li> <li>• Verbally and physically asks for help from an adult or peer by saying “Help,” grabbing their hand, and leading them over to the problem</li> </ul>

### Ways the educator might support the child’s development:

- Observe and respond to the child’s reflexive motions and movements with words and actions; for example, if the baby accidentally spits out their pacifier, the educator may say, “Where’s your pacifier? Here it is. I’m putting it back in your mouth.”
- Notice when the child is trying to use your body as a tool, and play along with them; for example, say, “You are moving my hand toward the mobile. I will make it turn again for you.”
- Create an environment with loose parts that the baby may freely explore
  - » Water cooler jugs and balls that children can drop through the top
  - » Containers with lids that children can attempt to pry off
  - » Buckets, baskets, bags, and purses for carrying materials around
  - » Boxes, blocks, and safe bean bags
- Include “busy boxes” in the learning environment so children can practice manipulating a variety of latches, laces, hooks, hinges, and locks
- Allow child to solve simple self-help challenges such as maneuvering a cup off an out-of-reach shelf
- Provide various materials that encourage problem-solving skills, such as ramps, tunnels, stools, big blocks, and train or car tracks
- Allow child time to figure out problem for themselves, instead of intervening immediately; for example, build time into the schedule for child to try and get their shoes on before going outside
- Encourage child to try doing a task, or suggest ways that they may be successful, such as getting a stool to reach the sink
- Ask if the child needs help and acknowledge and respect the response

## Over time, and with guidance and encouragement, children become increasingly capable of: **Engineering: Problem-solving with Materials**

Child plans and uses hands, tools, and technology to solve problems with materials.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Adjusts plans based on prior experience (e.g., when rolling cars down a ramp, tries a smaller car when bigger ones keep falling off)</li> <li>• Imitates accepted solutions to problems with materials (e.g., moves hands on laces as if to tie shoes, although they are unable to successfully do so)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses blocks or boxes to build bridges</li> <li>• When using materials, compares results to initial predictions and tries again (e.g., after discovering that the slime breaks if stretched quickly, stretches it more slowly)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses blocks to build stairs</li> <li>• Sticks with a problem-solving strategy that has been successful before, without considering other alternatives</li> <li>• Plans how to make a functional object from materials (e.g., a spinning top from Lego pieces)</li> <li>• Replicates engineering solutions from life in play (e.g., creating a door with a latch for a cardboard house)</li> </ul>

### Ways the educator might support the child’s development:

- Have everyday materials accessible for building and creating
  - » Pipe cleaners
  - » Paper towel rolls
  - » Different kinds of tape
  - » Shoe boxes
  - » Paper bags
  - » Wheels from broken toy trucks
  - » Clay
  - » Recyclables
  - » String
  - » Glue
- Experiment with the effect of natural forces on materials. For example, create a wind tunnel by blowing through a tube or float scarves, pompoms, and other objects through the tube
- Support children in thinking of themselves as engineers by asking questions such as
  - » “How can you use these materials to make..?”
  - » “What do you think would happen if...?”
  - » “Why do you think that happened?”
- Help children see that mistakes teach us important things
- Use fairytales to encourage building; for instance, read *The Three Little Pigs*, and ask groups of children to create houses that would withstand a wolf’s huffing and puffing
- Challenge children with prompts such as
  - » Make something with a window in it
  - » Make something that floats
- Ask the child about work they have done
  - » “Tell me about your construction.”
  - » “How do these parts work?”
  - » “What is their function?”
  - » “What’s another strategy that you could use?”

## Over time, and with guidance and encouragement, children become increasingly capable of: **Engineering: Problem-solving with Materials**

Child plans and uses hands, tools, and technology to solve problems with materials.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Investigates the motion and movement of objects when solving problems with materials (e.g., notices and compares how different balls bounce higher than others)</li> <li>• Identifies and describes tools made for different purposes</li> <li>• Uses sophisticated strategies to make their block buildings more stable</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses a second problem-solving strategy if the first one is unsuccessful</li> <li>• Pays attention to the relevant part of solving a problem (e.g., examines the attachment of the axles and wheels when the toy car won't roll)</li> <li>• Uses logic and reasoning to solve problems with materials (e.g., uses their knowledge of how the physical properties of objects affect their behavior and motion)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Takes more than one variable into account when solving problems with materials (e.g., considers both weight and distance when setting up a balance)</li> <li>• Plans their actions when encountering a difficult problem with materials</li> <li>• Systematically builds things and reverses their actions to take things apart</li> <li>• Identifies tools and simple machines made to solve problems by people long ago or in a different place, and compares those tools and machines to the ones we use today</li> </ul>

### Ways the educator might support the child's development:

- Include tools in the learning environment that children can access for a variety of purposes
  - » scissors
  - » staplers
  - » hole punches
  - » hammers
  - » measuring tapes
  - » hand drills
- Invite children to systematically test the stability of their block buildings by rolling balls at them
- Offer encouragement and guidance ("These problems can be solved! You can figure this out. What if you...?")
- Observe and reflect on children's processes as they solve problems with materials
- Consider which children are most engaged in engineering: Are girls as engaged as boys? Why or why not?
- Invite children to make complex marble runs, taking into account both the angle and length of the ramps
- Offer objects in the environment as models for children's problem-solving; for example, show them a hinge on a door, or point out how bricks are stacked in a building
- Invite families to visit the classroom and share a tool from their culture, nation of origin, or childhood
- Provide opportunities for children to learn problem-solving strategies from one another
- Challenge children to invent objects to solve common classroom or household problems (e.g., a magnetic paper-clip picker-upper)
- Look for texts that show different ways a problem has been solved throughout history (e.g., irrigation)



## V. COGNITIVE DEVELOPMENT

# G. Math

## 1. Comparing and Categorizing

Child recognizes some similarities and differences between familiar and unfamiliar people, objects, or experiences.



## Over time, and with guidance and encouragement, children become increasingly capable of: **Comparing and Categorizing**

Child recognizes some similarities and differences between familiar and unfamiliar people, objects, or experiences.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Distinguishes between objects they suck and those they do not</li> <li>• Smiles when they see or hear familiar caregiver</li> <li>• Gazes at unfamiliar object or person for longer period of time</li> <li>• Shows preferences for particular activities, such as being carried rather than pushed in the stroller</li> <li>• Explores how various toys feel and touches different objects in different ways</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Shows preference for particular items such as toys, cups, or clothing</li> <li>• Knows trash can is something you place items in, but may put objects other than trash in it</li> <li>• Selects a duck when educator asks, “Where’s the duck?”</li> <li>• When unfamiliar adult enters the room, may cry or move toward familiar person</li> <li>• Begins to understand the similarities and differences in speech sounds and distinguishes and imitates patterns of speech</li> <li>• Chooses to play with the red car even though there is a blue one just like it</li> <li>• Knows some objects that go together (e.g., puts the doll in a toy stroller)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Helps clean up environment by putting materials in their places; puts books in basket, for example, or blanket in cubby</li> <li>• Arranges objects in lines (e.g., makes a row of blocks)</li> <li>• Points to a duck in a book when the educator asks, “Which one says, ‘quack?’”</li> <li>• Identifies two identical toys by putting them together (or in response to the question, “Can you find one like this?”)</li> <li>• Calls all the four-legged animals on a farm “cows,” although some are sheep and some are horses</li> <li>• Connects objects and ideas, such as using a broom for sweeping or a shovel or cup to scoop sand or water</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Collects a single type of object (e.g., picks up pinecones on a walk in the park)</li> <li>• Calls a big animal “Papi” (“Daddy”) and a small animal “Bebe” (“Baby”)</li> <li>• Begins to sort similar items into categories such as color or shape (e.g., retrieves blue ball when asked, “Could you please get the blue one?”)</li> <li>• Identifies small, medium, and big objects when arranged in a series</li> <li>• Uses one-to-one correspondence with objects (e.g., puts one straw in each cup.) objects (e.g., puts one straw in each cup)</li> </ul>

### Ways the educator might support the child’s development:

- Narrate when familiar individuals enter the room. (“Here comes Ms. Kimball. You know Ms. Kimball. Hello, Ms. Kimball.”)
- Notice when a child is wondering about a new object (“You are looking at our new mobile. We hung it up in the window.”)
- Use descriptive vocabulary, such as rough, smooth, furry, bumpy, long, short, wet, and dry as children touch and explore their environment
- Describe objects by their size, color, and shape (“You are rolling the big, red ball.”)
- Talk about which objects go together during caregiving routines (“I am getting ready to change your diaper. I need a clean diaper, wipes, and gloves.”)
- Play language games that emphasize speech sounds; for example, repeat the consonant sounds that the baby makes
- Provide intentional collections of toys
  - » An animal family with a male, a female, and a young animal
  - » A variety of trucks, trains, and cars
  - » A doll with a bottle, a brush, and clothes
  - » A toy broom, mop, and dustpan
  - » A collection of objects that are all the same color
  - » A collection of heavy objects
  - » A collection of pieces of fabric such as velvet and burlap
- Store and display collections of items in separate, accessible, attractively presented bins
- Provide puzzles and toys that encourage matching, such as shape sorters
- Incorporate categorization into games with children; for example, make up a story together in the block area about a family of goats and a family of sheep
- Label the same objects in a group in different ways (“mommy, child, baby” and then “big, small, tiny.”)
- Encourage child to group toys and compare similarities and differences between them (e.g., “Let’s find all the toys with wheels.”)

## Over time, and with guidance and encouragement, children become increasingly capable of: **Comparing and Categorizing**

Child recognizes some similarities and differences between familiar and unfamiliar people, objects, or experiences.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Shows understanding of the words “same” and “different”</li> <li>Remarks on physical differences that they notice among members of the community</li> <li>Recognizes and labels aspects of an experience (tall, long, fun)</li> <li>Identifies categories of objects, for example, knows that dogs, cats, and cows are all animals</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Sorts by a given attribute, forming categories</li> <li>Uses comparative words (e.g., faster, slower, louder)</li> <li>Identifies the measurable attributes of objects such as length or weight and describes them using the appropriate vocabulary (e.g., small, big, short, tall, empty, full, heavy, light)</li> <li>Lines up objects in order to determine which is longer</li> <li>Fills large containers with cups of water and counts how many cups fit in each container</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Sorts by a single attribute and reclassifies according to another attribute (e.g., sorts writing implements by type and then re-sorts them by color)</li> <li>Arranges 5–10 objects shortest to longest, biggest to smallest, or heaviest to lightest</li> <li>Compares number of objects by counting, even when one of the objects is bigger, up to 10</li> </ul>

### Ways the educator might support the child’s development:

- Openly discuss differences children remark on in their community (“Yes, Mr. Brown has no legs. He uses his electric wheelchair to move around.”)
- Extend this learning about differences (“In what other ways do people move around?”)
- Play simple sorting games with children; for example, dress a paper doll for different kinds of weather
- Read books, such as those by Ann Morris, that show types of shoes, hats, bread, or transportation around the world
- Make a simple Bingo game with 9 squares of colors, shapes, or animals; the cards from this game can also be used for a simple matching game
- If children are comparing objects, offer them a standard or non-standard tool for measurement
- Play “duck, duck, goose” using different categories, such as “train, train, car”
- Compare characters in a story or subjects in a non-fiction text
- Create class charts and surveys with student information such as siblings, caretakers, or ways of getting to school; use these to compare aspects of the class
- Compare classroom materials, sorting different sizes or shapes of blocks, for example, and discussing how to use them



Photo credit: Shannon Taggart

## Over time, and with guidance and encouragement, children become increasingly capable of: **Comparing and Categorizing**

Child recognizes some similarities and differences between familiar and unfamiliar people, objects, or experiences.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Compares several aspects of something (e.g., compares animals, identifying similarities and differences between the ways they move, eat, and defend themselves)</li> <li>• Notices and compares changes over time. (e.g., compares the length of the day at different times of the year, saying, "It used to be dark when I was picked up.")</li> <li>• Uses a repeating unit to measure length (e.g., uses a line of small blocks to measure a book)</li> <li>• Identifies similarities and differences among the lives of people in different families and communities</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Reverses mental actions (e.g., knows that a ball of clay rolled into a long snake contains the same amount of clay as the ball)</li> <li>• Chooses a strategy for comparison (e.g., uses graphs to compare their observations of the natural world)</li> <li>• Understands the need for a standard unit when measuring length</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Creates hierarchical categorizations (e.g., child categorizes plants based on the ecosystems in which they live, then divides the plants that live in the desert into cacti and succulents)</li> <li>• Compares their home life to that of children who live in different places and to the lives of children who lived a long time ago</li> </ul>

### Ways the educator might support the child's development:

- Offer objects for comparison and categorization
  - » Photos of animals
  - » Collections of rocks or leaves
  - » Keys
  - » Buttons
- Engage children in using categorization for social good; for example, categorize recycling materials
- Provide unit blocks and rulers for measurement
- Create activities to measure distance (e.g., hold a paper airplane contest, then chart the results in a graph)
- Offer formats distinctly for comparison and categorization, such as Venn diagrams and three-column charts
- Offer vocabulary such as "traits," "similar," and "category"
- Use "greater than" and "less than" to compare quantity
- Compare standard and non-standard units of measure, some of which can be parts of the body; use inches, feet and meters, but also fingers, hands, and items like paper clips
- Invite families to visit the classroom to talk about their childhoods; use Venn diagrams to compare and contrast
- Read books aloud about children who live in different kinds of families; ask the children questions about how the character's lives are similar to and different from their own
- Visit a natural history museum or botanical garden and talk about the categories the curators use

V. COGNITIVE DEVELOPMENT

# G. Math

## 2. Number Sense and Quantity

Child understands and explores numbers and quantity.



## Over time, and with guidance and encouragement, children become increasingly capable of: **Number Sense and Quantity**

Child understands and explores numbers and quantity.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Holds one object in each hand and then drops one when someone holds out a third object</li> <li>• Explores one toy at a time by holding and mouthing it</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Tries to hold onto two large balls while reaching for third ball</li> <li>• Fills a bucket with objects and dumps it out</li> <li>• Holds a block in each hand and bangs them together</li> <li>• Shakes head “no” when asked if they want more food</li> <li>• Puts multiple blocks in each cup of a muffin tin</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Puts three animals in a row when playing</li> <li>• Understands and communicates the concepts of “more” and “all done” through words or gestures</li> <li>• Identifies which group has “more” with collections in which one has much more than the other</li> <li>• Names groups of one or two (e.g., when shown a pair of shoes, says “two shoes.”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Starts counting with “one”</li> <li>• Says all the number words they know when counting objects, even when the quantity of objects is small</li> <li>• Reuses the number words they know if the quantity of objects is greater than the number words they know</li> <li>• Uses “a little” and “a lot” to describe quantity</li> <li>• When told, “Give me one,” hands educator just one object</li> <li>• When educator says, “Just take two,” takes only two slices of apple from the bowl</li> <li>• Demonstrates one-to-one correspondence with objects (e.g., puts one block in each muffin tin)</li> </ul>

### Ways the educator might support the child’s development:

- Sing number songs to the child
  - » “Ten fingers, ten toes, two little eyes, one little nose...”
  - » “Five little ducks went out to play...”
  - » “Uno, dos, tres amigos...”
- Reference numbers and quantity as the educator interacts with the baby (“I see one little baby looking at me.”)
- As the child picks up, holds on to, and releases objects from their hands, name the quantity in each hand
  - Use comparative vocabulary as you interact with children. (“Carla has more cars than Shante.”)
  - Slowly count with children throughout the day. How many
    - » Steps on the staircase?
    - » Keys on a ring?
    - » Wheels on a car?
  - Encourage counting out loud in multiple languages
  - Read books about numbers that reinforce concepts of one-to-one correspondence, numerical order, and mathematical concepts of more, less, too many, and all gone
  - Use number and quantity vocabulary during meal-times (“two crackers, one apple, and one cup of milk), and count as you pour each cup of water (“one, two, three, and stop”)
  - Name groups of two objects, and identify groups that do not include two items (“That’s not two, that’s three!”)
  - Encourage children to set the table for snack or lunch with one cup, one plate, and one napkin at each chair
  - Use language to describe quantity throughout the day (“We have a *lot* of apples for snack! We have many *more* apples than we can eat.”)
  - Incorporate counting into representational play with children (“There are three bears in the house. One, two, three.”)
  - Provide egg cartons, ice cube trays, and muffin tins with small blocks so children can practice one-to-one correspondence

## Over time, and with guidance and encouragement, children become increasingly capable of: **Number Sense and Quantity**

Child understands and explores numbers and quantity.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Recognizes and names some numerals when pointing to them</li> <li>• Recognizes that numerals can be written and pretends or attempts to write some</li> <li>• Verbally counts to 10 with some correspondence, but skips some objects and counts others twice</li> <li>• Produces sets of three (e.g., “Bring me three paint brushes from the art center”)</li> <li>• When asked for five of something, counts out three and says, “One, two, five.”</li> <li>• Changes word order or gives up on one-to-one correspondence to make the answer the one they had predicted or their favorite number (e.g., “one, two, three, four, 100!”)</li> <li>• Matches small sets (one to four) of different items and shows they are the same quantity</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Attempts to count to 20 by ones.</li> <li>• Recognizes the number of objects in groups of four without counting</li> <li>• Accurately counts five to 10 objects in a line and answers the “how many” question with the last number counted</li> <li>• Can match a number of objects with a written numeral 0 to 5 (0 representing a count of no objects)</li> <li>• When asked for five of something, counts out five objects</li> <li>• Compares groups of one to six objects by matching (e.g., gives each child a bagel and says that there are the same number of bagels as children)</li> <li>• Counts the number of objects in a group so they can compare and say which has more, up to five objects; however, if the objects in one group are larger, may say that group has more (e.g., says three large trucks are more than five small cars)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Quickly names the number of objects in groups of five without counting</li> <li>• Tells what number comes after any number between one and 20</li> <li>• Explains that numbers tell “how many” of something</li> <li>• Recognizes and writes numerals 1 through 10</li> <li>• Divides up to 20 objects between four or five people by dealing out an object to each person</li> <li>• Uses the words “first,” “second,” “third,” up to and including “tenth” (e.g., says, “I came in fourth” when describing a race with classmates)</li> <li>• Counts on their fingers</li> <li>• Keeps track of objects that have and have not been counted (e.g., slides objects they have already counted to the side)</li> <li>• Counts backward from 10 by taking away objects</li> </ul>

### Ways the educator might support the child’s development:

- Use numbers and counting throughout the day, such as counting how many children are at the sand table
- Present sets of one to four objects and ask “How many?” questions; encourage children to name the sets before counting (“How many blocks do I have? That’s right I have two blocks.”)
- Point out quantities of items that the child possesses, such as two shoes, one hat, one jacket, or three stuffed animals; count each item out loud to correspond the number with the quantity of the items
- Model placing the objects that the child wants to count in a line
- Give child simple tasks that involve counting (“Give every child one cracker”)
- Observe children’s use of counting, one-to-one correspondence, estimating, and simple arithmetic in their play; connect to and extend this learning
- Offer games that ask children to match a numeral to a number of things
  - » String six beads on a pipe cleaner
  - » Pick a card and fill the basket with that number of objects
  - » Roll a dice and do a movement that many times
  - » Jump, clap, or stomp one to five times and ask the children to hold up the number of fingers that matches the number of movements
- Include books related to number and quantity in the learning environment
  - » *The Doorbell Rang*, by Pat Hutchins
  - » *Anno’s Counting Book*, by Mitsumasa Ann
  - » *Ten Black Dots*, by Donald Crews
  - » *City by Numbers*, by Stephen Johnson
  - » *Fish Eyes*, by Lois Ehlert
- Provide bags of objects to count (10 acorns, 14 keys, 19 cubes) and ask children to count and draw the objects in them
- Allow children to freely play with math manipulatives before using them to solve problems
- Set up the dramatic play area as a store, and invite children to use number cards to “purchase” objects
- Analyze the mathematical thinking in children’s errors
- Provide games with dice and dominoes so that children can practice recognizing the number of items in a small set without counting
- Find math in the body, and play finger math; for example, hold up three fingers on one hand and ask children how many fingers are folded down

## Over time, and with guidance and encouragement, children become increasingly capable of: **Number Sense and Quantity**

Child understands and explores numbers and quantity.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Understands that 10 is always 10, whether it is made by adding 6+4 or 7+3</li> <li>• Starts counting with numbers other than one (e.g., asked to count from four to seven, counts four, five, six, seven)</li> <li>• Answers questions about quantity such as, “How many more?” “How many fewer?” by counting up or down (e.g., when asked how many is three more than six? The child responds, “Six, seven [puts up a finger], eight [puts up another finger], nine [puts up a third finger]”)</li> <li>• Understands place value; understands value of a digit according to the place of the digit within a number</li> <li>• Makes whole objects from parts when counting (Given three whole plastic eggs and four plastic egg halves, knows they have five whole eggs)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Realizes that the number is unchanged, even when the arrangement looks different (e.g., when counters are spread out, says that there are the same number of counters as when they were together)</li> <li>• Understands the reversibility of operations (e.g., subtraction is the reverse of addition)</li> <li>• Uses groups, skip counting, and place value to quickly identify sets shown quickly (“I saw three sets of ten and three sets of two, so the answer is 36.”)</li> <li>• Uses a mental number line to compare numbers</li> <li>• Counts forward and backward by ones and using skip counting</li> <li>• Solves all types of single digit addition and subtraction problems, with flexible strategies and known combinations</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses groups, multiplication, and place value to visually recognize sets shown briefly. (“I saw groups of 10s and twos, so I thought six tens is 60 and four twos is eight, so 68.”)</li> <li>• Rounds numbers to the nearest 10 or 100</li> <li>• Builds skills to multiply and divide up to <math>10 \times 10</math> accurately</li> <li>• Solves word (story) problems using addition, subtraction, multiplication and division</li> </ul>

### Ways the educator might support the child’s development:

- Create a number line adding one number each day for the whole year, and use it to practice counting by ones, twos, fives, and tens
- Offer structures like a 100’s chart or number line sections for organizing number systems
- Play games in which children roll a dice or spin a spinner and move a piece along a path
- Provide strong context for solving problems with numbers (With 23 children in the class, does everyone have a snack if you have 18 snacks? How many more we need or how many extra do we have?)
- Play more games on a number line (If you start at 12, how many to get to 15? How do you get to 100 from 64?)
- Keep locating math in the body; ask questions like how many fingers in the class?
- Provide base 10 materials to model numbers
- Play “I’m Thinking of a Number” in which children seek clues of what numbers are smaller or larger than the one in mind
- Engage children in a cooking activity that calls for ingredients in  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{3}{4}$ , or  $\frac{1}{3}$  measures
- Ask children to write word problems that fit number sentences for their classmates to solve
- Practice addition, subtraction, multiplication, and division skills using Jeopardy-type games

## V. COGNITIVE DEVELOPMENT

# G. Math

## 3. Patterning

Child develops the ability to identify, describe, extend, and create patterns.



## Over time, and with guidance and encouragement, children become increasingly capable of: **Patterning**

Child develops the ability to identify, describe, extend, and create patterns.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Associates objects and actions with their daily rhythm (e.g., reaches for favorite blanket when tired)</li> <li>• Begins to show understanding of what comes next (e.g., burping after bottle, holding legs up for diapering)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Hands object back and forth to educator</li> <li>• Demonstrates understanding of what comes next in their daily routines (e.g., goes to get shoes after breakfast because the group always goes outside at this time)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Anticipates and follows familiar sequences of events (e.g., washes hands, sits at the lunch table)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Calls a striped shirt with no repeating unit a “pattern”</li> <li>• Copies simple repeating patterns. (e.g., if the educator squats then stands repeatedly, the child continues this motion)</li> </ul>

### Ways the educator might support the child’s development:

- Create and maintain predictable routines for the child’s day, including feeding, resting, bathing, and playing
- Rock and sway the child in rhythmic movements
- Use song to draw the child’s attention to the rhythm of the day (e.g. songs that include such phrases as “good morning,” “time for rest,” “time to say goodbye, see you tomorrow”)
- Rock, sway, swaddle, sing, and talk to the child with a flow and inflection that is repetitive and predictable
- Talk to families about the rhythms of their caregiving routines, in order to reaffirm children’s sense of what comes next.
- Play back-and-forth games with children
  - » Rolling balls
  - » Swinging
  - » Handing objects back and forth
- Use vocabulary related to patterns: “my turn” and “your turn”
- Read books that involve a simple sequence of events encompassing breakfast, lunch, dinner, or morning, noon and night, such as *The Big Red Barn*, by Margaret Wise Brown
- Sing repetitive songs, read repetitive stories, and recite nursery rhymes with child
  - » *I Went Walking*, by Sue Williams
  - » “The Wheels on the Bus”
  - » “Where is Thumbkin?”
  - » “Los Pollitos Dicen”
- Look for patterns in the natural and built environment with the child
- Encourage the child to help set the table at mealtimes
- Engage children in cooking activities where patterns are reinforced (e.g., when taking turns mixing, chant, “Stir, stir, stir, pass! Stir, stir, stir, pass!”)

## Over time, and with guidance and encouragement, children become increasingly capable of: **Patterning**

Child develops the ability to identify, describe, extend, and create patterns.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Recognizes patterns in their environment (e.g., looks at a striped scarf and says, "It's a pattern.")</li> <li>• Plays with patterns in language. (e.g., sings, "La di dee, la dee da, la dee di.")</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Describes simple AB patterns (e.g., when the teacher claps then stomps, child names whether to clap or stomp next)</li> <li>• Extends visual patterns; continues building a line of blocks that an older child has begun (e.g., triangle, triangle, square, triangle, triangle, square)</li> <li>• Identifies repeating patterns in numbers ("10, 20, and 30 all end in 0.")</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Creates and identifies simple repeating patterns (e.g., draws a pattern of hearts and stars around the edge of their picture)</li> <li>• Creates and extends simple growing patterns (e.g., stacks one, then two, then three blocks to make a staircase)</li> <li>• Explains growing patterns such as the pattern of "plus one" in addition ("If I add one, I get the next number.")</li> <li>• Describes a "jump, jump, clap" movement as two of something then one of something</li> <li>• Pays attention to the linguistic patterns in the names of numbers, "Four, forty, and four hundred all sound like four!"</li> </ul>

### Ways the educator might support the child's development:

- Create simple patterns with music; play the drums and dance with children
- Encourage children to point out patterns in the environment
- Engage children in patterns of movement
- Invite children to join you in creating a pattern of music using simple instruments such as a tambourine and a triangle
- Ask children to notice patterns in the world, such as in seasons or daily schedules
- Provide materials such as pattern blocks and color tiles that suggest creating AB patterns
- Use songs and games to teach patterns:
  - » Red Light, Green Light
  - » Duck, Duck, Goose
  - » Head, Shoulders, Knees, and Toes
- Provide materials such as wooden cubes to build a staircase to model a "plus one" pattern
- Create ABC patterns together using clapping, tapping, and patting on the body; ask children to follow your pattern and then allow them to lead, with you following their pattern
- Sing songs with patterns, such as "Everyone Comes from a Different Place"

## Over time, and with guidance and encouragement, children become increasingly capable of: **Patterning**

Child develops the ability to identify, describe, extend, and create patterns.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Identifies the smallest unit of a pattern</li> <li>Skip counts by tens, fives, and twos</li> <li>Explains the rule for a number pattern. For example, 5, 10, 15, 20 is the “plus five” number pattern</li> <li>Looks for and explains patterns in a number chart</li> <li>Understands the commutative principle of addition (<math>2+3 = 5</math>, <math>3+2 = 5</math>)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Skip counts by hundreds, tens, fives, twos</li> <li>Identifies the rule needed to extend a pattern or identify a missing number in a pattern (2, 5, 8, <math>\square</math>, 14, 17)</li> <li>Tells time to the nearest five minutes on different types of clocks</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>Skip counts by hundreds, tens, sixes, fives, fours, and twos</li> <li>Is able to detect an error in a number pattern</li> <li>Explains mathematical patterns using the properties of operations</li> <li>Generalizes the properties of multiplication. (<math>a \times 1 = a</math>) (<math>a \times b = b \times a</math>)</li> </ul>

### Ways the educator might support the child’s development:

- Continue to notice patterns in the world on numbered streets and avenues or windows on buildings
- Model addition with materials to ground math ideas in concrete experience; use two colors of tiles to show the commutative property of addition (two green and three red is five tiles; three green and two red is still five tiles)
- Invite children to make patterns while stringing with small beads or weaving
- Use materials such as pattern blocks to build growth patterns and describe them (“One hexagon has six sides. How many sides on two hexagons? On three hexagons?”)
- Invite children to observe, copy, and create patterns that grow; for example, make a square out of four cubes, make the square grow to nine cubes, then 16, and describe the pattern with numbers
- Create AABBA patterns for classmates to complete and/or find the errors
- Practice looking at an analog clock, describing the number correspondences
- Give children a sense of time (Time sitting in silence for a minute, then do something repetitive such as snapping fingers or drawing stars for a minute, two minutes, or five minutes.)



Photo credit: Sherry Cleary

## V. COGNITIVE DEVELOPMENT

# G. Math

## 4. Spatial Sense and Geometry

Child understands how objects, points, lines, and shapes fit in space.



## Over time, and with guidance and encouragement, children become increasingly capable of: **Spatial Sense and Geometry**

Child understands how objects, points, lines, and shapes fit in space.

0–9 months	8–16 months	15–24 months	24–36 months
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Looks at own hands and feet as they move through space</li> <li>• Watches a ball rolling away after accidentally knocking it</li> <li>• Observes a ball bounce up and down</li> <li>• Uses vision and hearing to track the path of someone walking by</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Attempts to roll body over</li> <li>• Puts smaller object inside larger one, such as placing small toy in a bucket</li> <li>• Uses trial and error to play with objects that can fit inside openings (e.g., tries to put different sized balls into the top of a large jug)</li> <li>• Repeatedly puts things in and takes them out (e.g., sticks a peg in a hole and pulls it out again)</li> <li>• Takes rings off a stacking ring and then puts one or two back on</li> <li>• Stacks blocks on each other, but may put bigger block on smaller one or try to balance a square on a triangle</li> <li>• Gets in and out of things (e.g., climbs into a large laundry basket and then climbs back out)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Rolls ball back and forth with educator</li> <li>• Puts together a knob puzzle with two or three separate pieces</li> <li>• Uses trial and error to place a group of nesting objects, such as boxes of different sizes, inside one another</li> <li>• Makes a line of blocks next to one another</li> <li>• Turns a book right side up after looking at the pictures and realizing it is upside down</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Matches shapes with similar sizes and orientations</li> <li>• Completes three or four piece puzzles</li> <li>• Stacks rings on a post with the biggest on the bottom and the smallest on the top</li> <li>• Understands words related to position. (e.g., “Please put the basket on the table” or “Please get under the covers.”)</li> <li>• Understands the words “longer,” “shorter,” “big,” and “little”</li> <li>• Places blocks on one another to make a stack, lining up the edges</li> </ul>

### Ways the educator might support the child’s development:

- Provide comfortable, safe space for the child to move freely on the floor
- Provide materials of various sizes and shapes for the child to explore, such as different types of fabrics, silicone muffin tins, ice trays, or metal jar rims
- Present collections of balls
- Use vocabulary related to spatial awareness (e.g., “in,” “on,” “under,” “up,” “down,” and “to”)
- Encourage pointing at objects, and verbally acknowledge the item that is being pointed to
- Provide materials in the learning environment that support the development of spatial sense
  - » Shape sorter
  - » Nesting cups
  - » Ring stackers
  - » Simple knob puzzles
- Provide collections of objects that are the same shape
  - » A collection of cubes, including boxes and blocks
  - » A collection of circles, including rings, lids, and round pieces of paper
- Encourage whole body movement
  - » Roll in the grass or on the rug
  - » Crawling, walking, and running over distance
  - » Kicking, throwing, and rolling balls
  - » Crawling through tunnels
- Name shapes in the environment
- Take children on community walks along different routes and discuss the landmarks you see; ask children to point to different landmarks at various points along the path
- Provide various size and shaped containers that children can fill with water, sand, or play dough
- Outline shapes on the floor using string or tape, and encourage the children to go inside
- Provide different sized boxes, wagons, and wheelbarrows that the children can climb in and out of and can use to move objects or other children
- Talk about the shapes of blocks with children; compare the blocks with one another
- Emphasize words describing where objects are in relation to one another (“beside” and “between”)
- Help the child to find themselves in space (“Where is your pinky finger? Where is your elbow?”)

## Over time, and with guidance and encouragement, children become increasingly capable of: **Spatial Sense and Geometry**

Child understands how objects, points, lines, and shapes fit in space.

3-year-olds	4-year-olds	5-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses words to indicate direction and position, but not always accurately</li> <li>• Builds vertical and horizontal components within a block building</li> <li>• Identifies and names circles and squares</li> <li>• Calls two shapes the same, if they have similar parts but are not identical (e.g., when both shapes have pointy parts)</li> <li>• Plays with combining shapes and pulling them apart</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses blocks to build in multiple directions, with multiple points of contact between components</li> <li>• Builds arches, enclosures, corners, and crosses</li> <li>• Follows a model to create simple shapes out of lines (e.g., organizes sticks to make a triangle or rectangle)</li> <li>• Slides and turns pieces to make them fit in a simple puzzle</li> <li>• Calls a shape a rectangle because it “looks like a door,” rather than naming sides and angles</li> <li>• Calls a variety of open or closed pointy shapes “triangles”</li> <li>• Experiments with combining shapes to make a new shape (e.g., in the block area, accidentally puts two triangles together to make a square, and then repeats this action intentionally)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Correctly uses position words such as “beside,” “under,” and “inside” to describe objects</li> <li>• Slides, flips and turns pieces to make them fit in a puzzle, but does not always move them in the right direction at first</li> <li>• Recognizes that there are other shapes that are not common (e.g., rhombus and hexagon)</li> <li>• Spontaneously creates symmetrical buildings in the block area</li> <li>• Builds complex bridges with multiple arches, ramps, and stairs at the ends</li> <li>• Intentionally puts pattern block shapes together to make another shape for a picture</li> </ul>

### Ways the educator might support the child’s development:

- Set up simple obstacle courses with children such as hopscotch, hopping over a hoop, jumping up and down, or twirling with a ribbon, use positional words such as “over,” “under” and “through” as children move through the obstacle course
- Tape shapes on the ground, and ask children to do movements as they go around them
- Name and identify shapes children make while drawing and writing
- Invite children to reach into “feely boxes” and pull out a shape that matches the one the educator is holding
- Identify shapes and angles in everyday life, such as a circles on the tops of cup, rectangular pieces of paper, the angle made when the scissors open, or the angle at the edge of the table
- Include materials in the classroom environment that develop geometric concepts
  - » Blocks
  - » Jigsaw puzzles
  - » Magnetic shapes
  - » Shape puzzles
  - » Pattern blocks
  - » Unit blocks
  - » Legos
- Go on community walks along different routes and discuss which route was longer or shorter and why
- Describe the location of objects the child is trying to find, rather than pointing to them (e.g., “The tape is beside the construction paper.”)
- Present many examples of squares and rectangles, varying orientation and size; include squares as examples of rectangles (If children say, “That’s a square,” reply, “It is a square, which is a special type of rectangle.”)
- Invite children to draw maps of routes, illustrating what landmarks will be passed or seen on different routes
- Draw maps of the playground and use them to go on a scavenger hunt
- Challenge the child to cover hexagon pattern blocks with other pattern blocks and see what works
- Introduce vocabulary such as “sides,” “angles,” and “parallel lines”
- Identify and describe the symmetry children spontaneously create in their art work
- Hunt for shapes outside and around the school; take photographs of them and print them out as shape books for the classroom

## Over time, and with guidance and encouragement, children become increasingly capable of: **Spatial Sense and Geometry**

Child understands how objects, points, lines, and shapes fit in space.

6-year-olds	7-year-olds	8-year-olds
<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses maps with picture clues to determine paths and find objects</li> <li>• Discriminates and names most common shapes, including rhombuses, without making mistakes such as calling ovals circles</li> <li>• Moves one shape on top of another to check if it fits exactly</li> <li>• Divides circles and rectangles into halves or fourths to develop understanding of part/whole</li> <li>• Uses blocks to make complex towers or other structures involving multiple levels with ceilings</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Pays attention to the spatial relationships of all the parts of complex figures</li> <li>• Folds paper squares to make two triangles, folds them again to make more triangles, and describes the process</li> <li>• Uses simple coordinates to locate a place on a map or a move on a chessboard</li> <li>• Systematically checks that two shapes are the same by comparing all attributes</li> <li>• Recognizes and describes situations in which angle knowledge is relevant (e.g., “I need to change the angle to make the car go faster down this ramp.”)</li> </ul>	<p><b>What the educator might observe:</b></p> <ul style="list-style-type: none"> <li>• Uses maps to follow routes, even when they don’t have pictures or the distances are not accurate</li> <li>• Mentally moves shapes and says what they need to do to make them fit into a puzzle</li> <li>• Names the class of shapes explicitly based on properties, including angle measure</li> <li>• Sorts shapes hierarchically, based on properties</li> </ul>

### Ways the educator might support the child’s development:

- Look at maps with children and encourages them to describe
  - » Direction—which way?
  - » Distance—how far?
  - » Location—where?
  - » Identification—what objects?
  - » Coordinates—what are they?
- Encourage children to make representations out of pattern blocks (for example, a ship with a smoke stack and rhombus-shaped smoke); they may trace their pattern block images to create pattern block puzzles for one another
- Read books by Rebecca Emberly and others that show how to represent objects with different shapes
- Invite children to use materials such as clay, straw, and pipe cleaners to construct shapes
- Encourage children to describe why a figure belongs or does not belong to a shape category
- Show children how to “test” right angles on rectangles with a “right-angle checker,” (thumb and index finger held apart at 90°, or the corner of a piece of paper)
- Solve construction problems with blocks
  - » Build a bridge from point A to point B
  - » Construct the tallest tower
  - » Attempt to build buildings observed in the neighborhood
- Create realistic and abstract art using shapes, lines, and understanding of orientation of those things on paper
- Observe the use of shapes in artwork from different cultures, drawing attention to the cultures of the children in the class
- Describe the properties of a shape and invite the children to name that shape
- Place shapes in a category, and ask children to name the reason for the classification

## Cognitive Development References

- Bloom, P. (2013). *Just babies: The origins of good and evil*. New York, NY: Crown Publishers.
- California Department of Education. (2008). California preschool learning foundations. Sacramento, CA: Author. Retrieved from <http://www.cde.ca.gov/sp/cd/re/documents/preschoolif.pdf>.
- California Department of Education. (2009). *California infant/toddler learning & development foundations*. Sacramento, CA: Author. Retrieved from <http://www.cde.ca.gov/sp/cd/re/documents/itfoundations2009.pdf>.
- Colorado early learning and development guidelines. (n.d.). Retrieved from [https://earlylearningco.org/pdf/ELDG\\_Guidelines\\_English.pdf](https://earlylearningco.org/pdf/ELDG_Guidelines_English.pdf).
- Clements, D. A. (2009). *Learning and teaching math: The learning trajectories approach*. New York, NY: Routledge.
- Clemens, D., Coburn, C., Farran, D., Franke, M., & Spitek, D. (2017, February). Pre-K-3: What does it mean for instruction? *Social Policy Report / Society for Research in Child Development*. Volume/issue (30)2.
- High Scope Educational Research Foundation. (n.d.). *Preschool child observation record*. Ypsilanti, MI: Author.
- Irving Harris Foundation Professional Development Network. (2012, updated 2018). *Diversity-informed tenets for work with infants, children, and families*. Chicago, IL: Irving Harris Foundation. Retrieved from <https://imhdivtenets.org/tenets/>
- Marotz, L., & Allen, E. K. (2015). *Developmental profiles: Pre-birth through adolescence*. (8th Ed.) Boston, MA: Cengage Learning.
- National Academies of Sciences, Engineering, and Medicine. (2018). *How people learn II: Learners, contexts, and cultures*. Washington, DC: National Academies Press.
- New York State Education Department. (2019, April 17). *K-12 social studies framework*. Retrieved from <http://www.nysed.gov/curriculum-instruction/k-12-social-studies-framework>.
- New York State Education Department. (2019, April 17). *New York State next generation mathematics learning standards*. Retrieved from <http://www.nysed.gov/curriculum-instruction/new-york-state-next-generation-mathematics-learning-standards>.
- New York State Education Department. (2019, April 17). *Science learning standards*. Retrieved from <http://www.nysed.gov/curriculum-instruction/science-learning-standards>.
- Office of Head Start. (2015). *Head Start early learning outcome framework*. Washington, DC: U.S. Department of Health and Human Services.
- Office of Head Start. (2018). *Revisiting and updating the multicultural principles for Head Start programs serving children ages birth to five*. Retrieved from <https://eclkc.ohs.acf.hhs.gov/culture-language/article/multicultural-principles-early-childhood-leaders>.
- Sanrock, J.W. (2007). *Children (Ninth Edition)*. New York, NY: McGraw-Hill.
- Washington State Department of Early Learning. (2012). *Washington State early learning and development guidelines: Birth through 3rd grade*. Olympia, WA: Author. Retrieved from [www.del.wa.gov/development/benchmarks/Default.aspx](http://www.del.wa.gov/development/benchmarks/Default.aspx).
- Wood, C. (2018). *Yardsticks: Child and adolescent development 4–14*. (4th Ed.). Turners Falls, MA: Center for Responsive Schools.
- Zero to Three. (2015). *Critical competencies for infant-toddler educators*. Washington, DC: Author. Retrieved from [www.zerotothree.org/resources/1197-zero-to-three-critical-competencies-for-infant-toddler-educators-related-professional-criteria#downloads](http://www.zerotothree.org/resources/1197-zero-to-three-critical-competencies-for-infant-toddler-educators-related-professional-criteria#downloads)



# Home Language Survey

This survey will help educators gather important information about your child’s exposure to languages in the home and in the community. This will help educators support your child’s language development. If your child is an infant or a toddler, please answer these questions to the best of your ability.

## LANGUAGE IN THE HOME

1. In what language(s) do you speak to your child at home? \_\_\_\_\_
2. What is/are the primary language(s) of each family member in your home? (List all that apply.) \_\_\_\_\_
3. Is there a childcare provider (e.g. babysitter, nanny) in the home?  yes  no  
If yes, what language(s) does the childcare provider speak to the child most frequently? \_\_\_\_\_
4. What language(s) does your child understand? \_\_\_\_\_
5. In what language(s) does your child say words or sentences? \_\_\_\_\_
6. Does your child have siblings?  yes  no  
If yes, in what language(s) do the children speak with each other most of the time? \_\_\_\_\_
- 7a. At what age did your child begin to say words? \_\_\_\_\_  
In what language? \_\_\_\_\_
- 7b. At what age did your child begin to speak in sentences? \_\_\_\_\_  
In what language? \_\_\_\_\_
8. In what language does your child play? \_\_\_\_\_
9. Has your child learned English? If so, how (television shows, siblings, childcare, etc.)? \_\_\_\_\_

## LANGUAGE OUTSIDE THE HOME/FAMILY

10. Has your child attended any child care program (e.g. daycare, Head Start)?  yes  no  
If yes, what language(s) did their educators speak in the classroom? \_\_\_\_\_  
In what language does your child interact with other people in the childcare setting? \_\_\_\_\_
11. How would you describe your child’s language use with peers? \_\_\_\_\_

## LANGUAGE GOALS

12. What are your language goals for your child? For example, do you want your child to understand and speak more than one language? Explain.  
\_\_\_\_\_
13. Have you encouraged your child to be bilingual or multilingual?  yes  no  
If so, how? \_\_\_\_\_
14. Does your child need to speak a language other than English in order to communicate with your relatives or extended family?  yes  no  
If yes, in what language(s)? \_\_\_\_\_

## EMERGENT LITERACY

15. Does your child have books at home, or do they read books from the library? \_\_\_\_\_  
In what language(s) are these books read to them? \_\_\_\_\_
- 16a. Can your child recognize any letters or make letter sounds in English?  yes  no
- 16b. Can your child recognize letters or symbols in another language?  yes  no  
If yes, in what language(s)? \_\_\_\_\_
- 17a. Does your child pretend to read  yes  no  unsure If yes, in what language(s)? \_\_\_\_\_
- 17b. Does your child pretend to write?  yes  no  unsure  
If yes, in what language(s)? \_\_\_\_\_
18. Does your child tell the stories from their favorite books or videos?  yes  no  
If yes, in what language(s)? \_\_\_\_\_
19. Does your child’s early childhood program describe goals for their learning?  yes  no  
If so, what goals do they describe? \_\_\_\_\_
20. Please describe anything special about your child’s transition into this program?  
\_\_\_\_\_

## Funds of Knowledge

This survey will help educators gather important information about families' knowledge, skills and interests. Educators can use this information to form trusting relationships with children and plan responsive and engaging curriculum. This survey can be completed in conversation with the child's family.

	Examples	Family knowledge
<b>Home language and language varieties</b>	Spanish, Chinese, Arabic, African American Vernacular English	
<b>Songs, Stories, and Storytelling</b>	Favorite songs, books, fairy tales, folk tales, bedtime stories, family history	
<b>Nutrition</b>	Meal planning, cooking, mealtime rituals	
<b>Art-making</b>	Crafts, fine arts, decorative arts	
<b>Music and Dance</b>	Instruments, genres of music and dance	
<b>Family Occupations</b>	Farming, office work, teaching, medicine	
<b>Hobbies</b>	Fishing, woodworking, knitting	
<b>Travel</b>	Places of origin, vacations	
<b>Community engagement</b>	Faith-based service, labor unions, block associations	
<b>Geography</b>	Neighborhood landmarks, streets, paths, rivers	
<b>Ecology</b>	Pets, farm animals, farming, gardening, hiking	

# Observation Template

Who?	
When?	
Where?	
What?	
Domains observed	

RESPONSIVE PLANNING FORM	
Child(ren) Name(s): _____	Date: _____
<b>DOCUMENT:</b> <i>What are the children doing/saying?</i>	
<b>REFLECT:</b> <i>How do my observations link to what I know about the children’s culture and interests? How do my observations connect to the Early Learning Guidelines?</i>	
<b>RESPOND:</b> <i>What are my next steps in response to the children’s culture, skills and interests?</i>	
<ul style="list-style-type: none"> <li>• Large-group activity</li> <li>• Small-group activity</li> <li>• Center modification</li> <li>• Language/questioning</li> </ul>	<ul style="list-style-type: none"> <li>• Routines</li> <li>• Transitions</li> <li>• Family Engagement</li> <li>• Other</li> </ul>
<b>WONDER:</b> <i>What will be the focus of my documentation?</i>	

- | DEVELOPMENTAL DOMAINS  |
|--|
| <p><b>1. Approaches to Learning</b></p> <ul style="list-style-type: none"> <li>• Curiosity and Interest</li> <li>• Initiative</li> <li>• Persistence and Attentioness</li> <li>• Creativity and Inventiveness</li> </ul>   |
| <p><b>2. Physical Development</b></p> <ul style="list-style-type: none"> <li>• Large Motor Skills</li> <li>• Small Motor Skills</li> <li>• Sensory Integration</li> <li>• Self-Care</li> <li>• Healthy Sexuality</li> </ul>  |
| <p><b>3. Social &amp; Emotional Development</b></p> <ul style="list-style-type: none"> <li>• Trusting Relationships with Adults</li> <li>• Sense of Belonging</li> <li>• Sense of Self</li> <li>• Empathy</li> <li>• Emotional Self-Regulation</li> <li>• Cooperation and Negotiation</li> <li>• Rhythms, Rules and Routines</li> </ul>  |
| <p><b>4. Language, Communication &amp; Literacy</b></p> <ul style="list-style-type: none"> <li>• Background Knowledge</li> <li>• Speaking</li> <li>• Listening and Understanding</li> <li>• Social Communication</li> <li>• Engagement with Stories and Books</li> <li>• Phonological Awareness</li> <li>• Composing</li> <li>• Creating and Interpreting Multimedia Texts</li> </ul>                  |
| <p><b>5. Cognitive Development</b></p> <ul style="list-style-type: none"> <li>• Stability and Change</li> <li>• Representing</li> <li>• Memory and History</li> <li>• Investigating and Exploring</li> <li>• Cause and Effect</li> <li>• Engineering</li> <li>• Comparing and Categorizing</li> <li>• Number Sense and Quantity</li> <li>• Patterning</li> <li>• Spatial Sense and Geometry</li> </ul> |

# Glossary

**Academic language:** Language characterized by complex narrative, sentence structure, and vocabulary. This language is acquired with opportunities to practice through repeated exposure and intentional interactions.

**Alliteration:** The repetition of identical or similar sounds at the beginning of words (e.g., *bumbling bees*).

**Authentic assessment:** A systematic tool to reflect on children's learning and development in the context of their everyday routines in the learning environment. Educators engage in this practice by gathering high quality observation notes, pictures/video, and work samples that capture meaningful moments of a child's unique development.

**Autonomy:** The ability of an individual to make their own decisions. For example, a child may express autonomy by crawling over to the cozy area and picking up a toy they are curious about.

**Background knowledge:** The information that children learn and store in their memories—including information about themselves, other people, objects, and the world around them.

**Bias:** An unfair inclination or preference either for or against an individual or group.

**Biliteracy:** This refers to the development of high levels of proficiency in listening, speaking, reading, and writing in more than one language.

**Cognates:** Words that have a shared root. When learning a new language, shared cognates help build a bridge between the home and acquired language. For example, in Spanish-English, some exact cognates are *animal* and *chocolate*, and similar cognates are *family* and *familia*, *center* and *centro*.

**Cognitive:** The ability to consciously understand, perceive, reason, and remember

**Continuity of Care:** An approach to childcare in which children are not moved to a new group with a new caregiver during the infancy period (first three years of life). Either the whole group moves together into more appropriate space as children get more mobile or the caregiver modifies the environment to meet the children's changing needs. Some programs group children who are roughly the same age together and some may mix the ages of children in a group to be more like a family.

**Culture:** A set of shared understandings or shared expectations learned consciously and unconsciously by a group of people. These patterns can be seen in language, governing practices, arts, customs, holiday celebrations, food, religion, dating rituals, and clothing.

**Cultural competencies:** The behaviors, attitudes, and practices of a professional community that enable cross-cultural communication. Development of cultural competencies is a dynamic, ongoing process and long-term commitment to learning from and about children and their families.

**Culturally and linguistically responsive practice:** Ways of engaging families and educating children that affirm children's positive social and linguistic identities. Educators build their understandings of the communities in which they work, develop linguistic and cultural competencies, and actively work to reduce teacher biases in order to increase marginalized children's educational access and equity.

**Decode:** Using knowledge of letter sounds or letter patterns in order to sound out words when reading.

**Documentation:** Evidence of observations that include, but are not limited to, photos, anecdotes, video, and language samples.

**Dominant culture:** Prevalent cultural practices in a society that create the norms for expected behavior. In the United States white, patriarchal, Christian culture is dominant.

**Educator:** An adult who supports children’s learning and development (e.g., family child care provider, caregiver, or teacher).

**Developmental milestones:** A set of functional skills or age-specific tasks that most children can do at a certain age range.

**Developmental screening:** The use of standardized questionnaires and brief assessments to identify potential developmental delays in children and allow for early treatment and supportive services.

**Disability:** Disability refers to any condition of the body or mind that makes it more difficult for the person to function in the environment around them (e.g., seeing, hearing, speaking, walking, communicating, sensing, breathing, performing manual tasks, learning, working, or caring for oneself).

**Equity:** All people getting what they need in order to have access, opportunities, and a fair chance to succeed. An equity stance recognizes that the same for everyone (equality) doesn’t truly address needs, and therefore, specific solutions and remedies, which may be different for different people, are necessary.

**Emergent multilingual learner:** Preschool children who are learning a language other than English and who have the opportunity to become bilingual or multilingual in school.

**Ethnicity:** Refers to a person’s identification with a group based on characteristics such as shared history, ancestry, geographic and language origin, and culture.

**Etymology:** The earliest form and use of the word traced in its chronological history.

**Gender:** The socially defined “rules” and roles for people in a society. The attitudes, customs, and values associated with gender are socially constructed. However, individuals develop their gender identities in two primary ways: through an innate sense of their own identity and through their life experiences and interactions with others. Dominant Western culture generally defines gender as a binary system—men and women—but many cultures define gender as more fluid and existing along a continuum.

**Gender expression:** Refers to the ways in which people externally communicate their gender identity to others through behavior, clothing, haircut, or voice and through emphasizing, de-emphasizing, or changing their bodies’ characteristics. Gender expression is not an indicator of sexual orientation.

**Gender Identity:** How an individual identifies in terms of their gender. Since gender identity is internal, one’s gender identity is not necessarily visible to others.

**Implicit bias:** The unconscious attitudes, stereotypes, and unintentional actions (positive or negative) toward members of a group merely because of their membership in that group. These associations develop over the course of a lifetime, beginning at a very early age, through exposure to direct and indirect messages. When people are acting upon their implicit bias, they are not aware that their actions are biased. In fact, those biases may be in direct conflict with a person’s explicit beliefs and values.

**Inequity:** Refers to a lack of fairness or justice; unfair and avoidable differences in treatment or experience.

**Injustice:** A situation in which the rights of a person or a group of people are ignored or disrespected.

**Integrated curriculum:** A curriculum in which learning occurs across multiple domains and/or subject areas.

**Internalize:** A process through which people come to identify parts of a culture as parts of themselves, especially in relation to norms and values.

**Language variation:** A regional, social, or contextual variation in the way a language is used.

**Literacies:** Multiple, diverse, and multilingual skills and competencies that enable communication, understanding, and access.

**Marginalization:** The set of processes through which some individuals and groups face systematic disadvantages in their interactions with dominant social, political, and economic institutions. The disadvantages arise from class status or social group identity (kinship, ethnicity, caste and race, gender, age, and disability).

**Microaggressions:** The everyday slights, indignities, put-downs, and insults that marginalized people experience in their day-to-day interactions. Microaggressions can seem to be a compliment but contain a hidden insult to the target groups to which they are delivered. They are often outside the level of conscious awareness of the perpetrator, which means they can be unintentional.

**Morpheme:** The smallest unit of meaning in an oral language.

**Norm:** Shared expectation for children's behavior.

**Patriarchy:** A social system or organization in which power is primarily held by men, or individuals who believe men should hold the most power over all others.

**Phoneme:** The smallest unit of sound in a language.

**Primary caregiving:** A continuity of care practice that involves assigning one primary caregiver to each child and family in the program. Sometimes it is necessary to have more than one primary caregiver if the child is in care many hours. The primary caregiver is responsible for their small group of children. They carry out most of the daily care routines and get to know the child and family well. They are responsible for this child's records, for monitoring the child's development, planning appropriate activities and maintaining close ties with the family.

**Privilege:** A term for unearned and often unseen or unrecognized advantages, benefits, or rights conferred upon people based on their membership in a dominant group (e.g., white people, heterosexual people, males, or people without disabilities) beyond those commonly experienced by members of the non-dominant group. Privilege reveals both obvious and less obvious unspoken advantages that people in the dominant group may not recognize they have, which distinguishes it from overt bias or prejudice. These advantages include cultural affirmations of one's own worth; presumed greater social status; and the freedom to move, buy, work, play, and speak freely.

**Race:** A false, hierarchical classification system of human beings that draws on physical characteristics such as skin color, hair texture, and bone structure to reinforce the idea that race is biological. However, there is no scientific basis for race.

**Racism:** A system of social structures that provides or denies access, safety, resources, and power based on race categories; the system produces and reproduces race-based inequities.

**Rhyme:** Words with similar sounding endings.

**Sensory integration:** The neurological process that organizes sensation from one's own body and from the environment (sight, hearing, smell, touch, taste, proprioception, and vestibular function) and makes it possible to use the body effectively within the environment.

**Sexism:** Prejudice and/or discrimination against people based on their real or perceived gender. Sexism is based on an unfair belief (conscious or unconscious) that there is a natural order based on gender.

**Standards:** Student learning expectations: concepts all students should know and tasks all children should be able to do as a result of skilled instruction.

**Translanguaging:** Using a home language and English interchangeably in social communication.

**Text:** Fiction and nonfiction books, magazines, brochures, and posters; various art forms such as poetry, drawing, painting, and sculpture; can also refer to multimedia and information communication technology (ICT) texts.

## Appendix References

Anti-Defamation League. (2017). *Glossary of educational terms*. Retrieved from <https://www.adl.org/sites/default/files/documents/glossary-of-education-terms.pdf>.

Blaise, M., Hamm, C., & Iorio, J. M. (2017). Modest witness(ing) and lively stories: Paying attention to matters of concern in early childhood. *Pedagogy, Culture & Society*, 25(1), 31–42.

Center for Racial Justice in Education. (2019). *What is racism? How does it manifest?* New York, NY: Author.

González, N., Moll, L. C., & Amanti, C. (Eds.). 2005. *Funds of knowledge: Theorizing practices in households, communities, and classrooms*. Mahwah, NJ: Erlbaum.

Ministry of Education. (2017). *Te Whāriki: Early childhood curriculum*. New Zealand: Author.

Morell, Z., & Medellin, C. (2018). *Core principles for supporting emergent multilingual learners (EMLLs)*. New York City Division of Early Childhood Education.

New York State Education Department. (2019, April 17). *Bilingual education and English as a New Language. Home language questionnaire*. Retrieved from <http://www.nysed.gov/bilingual-ed/ell-identification-placementhome-language-questionnaire>.

Zero to Three. (2008). *Early learning guidelines for infants and toddlers: recommendations for states*. Washington, DC: Author. Retrieved from [http://www.zerotothree.org/public-policy/building-early-childhood-systems/early\\_learning\\_guide\\_for-infants.pdf](http://www.zerotothree.org/public-policy/building-early-childhood-systems/early_learning_guide_for-infants.pdf).

## Selected Children's Books

- Adams, P. (2003). *There was an old lady who swallowed a fly*. Wiltshire, England: Child's Play International.
- Adler, V. (2011). *All of baby, nose to toes*. New York, NY: Dial Books.
- Ann, M. (1977). *Anno's counting book*. New York, NY: Crowell.
- Art, I. S. (1999). *Lucy Micklethwait*. London, England: Puffin Books.
- Asim, J. (2006). *Whose toes are those?* New York, NY: LB Kids.
- Bang, M. (2004). *Sophie gets angry, really, really angry*. New York, NY: Scholastic Paperbacks.
- Barber, B. E. (1998). *Allie's basketball dream*. New York, NY: Lee & Low Books.
- Bates, A. J. (2018). *The big umbrella*. New York, NY: Paula Wiseman Books.
- Beatty, A. (2013). *Rosie Revere, engineer*. New York, NY: Abrams Books.
- Beaty, A. (2007). *Iggy Peck, architect*. New York, NY: Abrams Books.
- Beaumont, K. (2005). *I ain't gonna paint no more*. Boston, MA: HMH Books for Young Readers.
- Boelts, M. (2009). *Those shoes*. Somerville, MA: Candlewick Press.
- Books, S. B. (2011). *My face book*. New York, NY: Star Bright Books.
- Bowie, C. (2004). *Busy fingers*. Watertown, MA: Charlesbridge.
- Brown, M. W. (2016). *The dead bird*. New York, NY: Harper Collins.
- Brumbeau, J. (2001). *The quiltmaker's gift*. New York, NY: Scholastic Press.
- Bryan, J. (2011). *The different dragon*. Ridley Park, PA: Two Lives Publishing.
- Bunting, E. (2006). *One green apple*. Boston, MA: Clarion Books.
- Burton, V. L. (1974). *Katy and the big snow*. Boston, MA: HMH Books for Young Readers.
- Camp, R. V. (2018). *Kiss by kiss*. Victoria, BC: Orca Book Publishers.
- Carl, E. (2002). *Brown bear, brown bear, what do you see?* New York, NY: Simon & Schuster Books for Young Readers.
- Carle, E. (1994). *The very hungry caterpillar*. New York, NY: Philomel Books.
- Children, T. G. (2007). *Global babies*. Watertown, MA: Charlesbridge.
- Cooke, T. (2008). *Full, Full, Full of Love*. Somerville, MA: Candlewick Press.
- Crews, D. (1995). *Ten black dots*. New York, NY: Greenwillow Books.
- Cronin, D. (2000). *Click, clack, moo: Cows that type*. New York, NY: Atheneum Books for Young Readers.
- Dewdney, A. (2005). *Mama llama red pajama*. New York, NY: Viking.
- Ehlert, L. (1996). *Eating the alphabet*. Boston, MA: HMH Books for Young Readers.
- Ehlert, L. (2001). *Fish eyes*. Minnesota, MN: Red Wagon Books.
- Farrell, J. (2008). *Dear child*. Honesdale, PA: Boyds Mills Press.
- Fine, E. H. (2010). *Under the lemon moon*. Boston, MA: National Geographic School Publishing.
- Fox, M. (2010). *Ten little fingers and ten little toes*. Boston, MA: HMH Books for Young Readers.
- Frankel, A. (2014). *Once upon a potty*. Richmond Hill, ON: Firefly Books.
- Gomi, T. (1993). *Everyone poops*. La Jolla, CA: Kane/Miller Book Publishers.
- Haan, L. D. (2003). *King & king*. Toronto, ON: Tricycle Press.
- Henkes, K. (2006). *Lily's purple plastic purse*. New York, NY: Greenwillow Books.
- Hill, E. (2003). *Where's Spot?* London, England: Warne.
- Hirst, J. (2015). *The gender fairy*. Balaclava, Victoria: Oban Road Publishing.
- Hoffman, M. (1991). *Amazing Grace*. New York, NY: Dial Books.
- Hooks, b. (2016). *Be boy buzz*. New York, NY: Jump At The Sun.
- Hutchins, P. (1989). *The doorbell rang*. New York, NY: Greenwillow Books.
- Johnson, C. (1955). *Harold and the purple crayon*. New York, NY: Harper Collins Publishers.
- Johnson, S. (2003). *City by numbers*. London, England: Puffin Books.
- Johnson, S. T. (1999). *Alphabet City*. London, England: Puffin Books.
- Katz, K. (2000). *Where is baby's belly button?* New York, NY: Little Simon.
- Katz, K. (2002). *The colors of us*. New York, NY: Square Fish.
- Kerr, J. (2003). *Goodbye Mog*. London, England: HarperCollins UK.

- Kilodavis, C. (2010). *My princess boy*. New York, NY: Aladdin Paperbacks.
- Kissinger, K. (2002). *All the colors we are: The story of how we get our skin color*. St. Paul, MN: Redleaf Press.
- Lee, S., & Lewis Lee, T. (2002). *Please, baby, please*. New York, NY: Simon & Schuster Books for Young Readers.
- Lionni, L. (1967). *Frederick*. New York, NY: Random House.
- Lionni, L. (1969). *Alexander and the wind-up mouse*. New York, NY: Knopf Books for Young Readers.
- Lionni, L. (2017). *Swimmy*. New York, NY: Dragonfly Books.
- Love, J. (2018). *Julian is a mermaid*. Newton, Australia: Walker Books.
- Ludwig, T. (2013). *The invisible boy*. New York, NY: Knopf Books for Young Readers.
- Manuel, M. (2009). *I see me*. Penticton, BC: Theytus Books.
- Martin, B. (2012). *Chicka chicka boom boom*. New York, NY: Little Simon.
- Mayeno, L. (2016). *One of a kind like me*. Oakland, CA: Blood Orange Press.
- McDermott, G. (2017). *Anansi the spider*. New York, NY: Henry Holt and Company.
- McDonald, J. (2018). *Hello, world!: My body*. New York, NY: Doubleday Books for Young Readers.
- Miller, S. (2017). *Princess hair*. New York, NY: Little, Brown Books for Young Readers.
- Morrison, E. (2018). *C is for consent*. Los Angeles, CA: Phonics with Finn.
- O'Leary, S. (2016). *A family is a family is a family*. Toronto, Ontario: Groundwood Books.
- Ortiz, A. C. (2007). *Adivinanzas in Mixteco (Riddles in Mixteco)*. Mexico City, Mexico: Artes De Mexico Y Del Mundo S.A.
- Parr, T. (2010). *The family book*. New York, NY: Little, Brown Books for Young Readers.
- Parr, T. (2015). *The goodbye book*. New York, NY: Little, Brown Books for Young Readers.
- Peña, M. D. (2015). *The last stop on Market Street*. New York, NY: G.P. Putnam's Sons Books for Young Readers.
- Pessin-Whedbee, B. (2016). *Who Are You?* London, England: Jessica Kingsley Publishers.
- Pinkney, A. Davis. (1997). *Pretty brown face*. Boston, MA: HMH Books for Young Readers.
- Pinkney, J. (2009). *The lion and the mouse*. New York, NY: Little, Brown Books for Young Readers.
- Pitzer, M. W. (2004). *I can, can you?* North Bethesda, MD: Woodbine House.
- Polacco, P. (1994). *Pink and Say*. New York, NY: Philomel Books.
- Polacco, P. (1998). *Chicken Sunday*. London, England: Puffin Books.
- Polacco, P. (2012). *Thank you, Mr. Falker*. New York, NY: Penguin Putnam.
- Rathman, P. (1995). *Officer Buckle and Gloria*. New York, NY: G.P. Putnam's Sons Books for Young Readers.
- Reichmuth, B. (2016). *I'm Jay, let's play*. San Francisco, CA: Beth Reichmuth.
- Reynolds, P. (2003). *The dot*. Somerville, MA: Candlewick Press.
- Rogers, F. (1996). *Making friends*. London, England: Puffin Books.
- Saltzberg, B. (2010). *Beautiful oops*. New York, NY: Workman Publishing.
- Santoso, C. L. (2016). *Ida always*. New York, NY: Atheneum Books for Young Readers.
- Schiffer, M. B. (2015). *Stella brings the family*. San Francisco, CA: Chronicle Books.
- Sendak, M. (2017). *Alligators all around*. New York, NY: Harper Collins.
- Silver, G. (2009). *Ahn's anger*. Toronto, Canada: Plum Blossom.
- Silverberg, C. (2013). *What makes a baby*. New York, NY: Triangle Square.
- Silverberg, C. (2015). *Sex is a funny word: A book about bodies, feelings, and you*. New York, NY: Triangle Square.
- Slier, D. (2013). *Loving me*. Cambridge, MA: Star Bright Books.
- Smith, M. G. (2016). *My heart fills with happiness*. Victoria, BC: Orca Book Publishers.
- Steig, W. (2009). *Amos and Boris*. Boston, MA: Houghton Mifflin Harcourt.
- Step toe, J. (2018). *Baby says*. New York, NY: Harper Festival.
- Tarpley, N. A. (2001). *I love my hair!* New York, NY: Little, Brown Books for Young Readers.
- Trivizas, E. (1997). *The three little wolves and the big bad pig*. New York, NY: Margaret K. McElderry Books.
- Valdivia, P. (2017). *And so it goes*. Toronto, Ontario: Groundwood Books.
- Verdick, E. (2008). *Diapers are not forever*. Minneapolis, MN: Free Sprit Publishing.
- Williams, V. B. (1997). *More, more, more, said the baby*. New York, NY: Greenwillow Books.
- Woodson, J. (2012). *Each kindness*. New York, NY: Nancy Paulsen Books.
- Young, E. (1998). *Cat and rat*. New York, NY: Square Fish.
- Young, E. (2002). *Seven blind mice*. London, England: Puffin Books.

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