# North Dakota Early Learning Standards Writing Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Janet Bassingthwaite</td>
<td>Associate Professor</td>
<td>University of Mary</td>
</tr>
<tr>
<td>Rebecca Campbell</td>
<td>Early Childhood Special Education Administrative Intern</td>
<td>Fargo Public Schools</td>
</tr>
<tr>
<td>Wendy Hanson</td>
<td>Preschool Head Start Teacher</td>
<td>Mayville State University</td>
</tr>
<tr>
<td>Rebecca Ibach</td>
<td>Lead Preschool Teacher</td>
<td>First Presbyterian Child Care Center</td>
</tr>
<tr>
<td>Donna Johnson</td>
<td>Special Education Coordinator</td>
<td>West Fargo Public Schools</td>
</tr>
<tr>
<td>Stephanie Kennedy</td>
<td>Kindergarten Teacher</td>
<td>Hettinger Public School</td>
</tr>
<tr>
<td>Taylor Krieg</td>
<td>Education Coordinator</td>
<td>Dickinson Early Head Start</td>
</tr>
<tr>
<td>Kay Larson</td>
<td>Team Lead</td>
<td>Child Care Aware of North Dakota</td>
</tr>
<tr>
<td>Shannon Larson</td>
<td>Early Childhood Special Education Teacher</td>
<td>Fargo Public Schools</td>
</tr>
<tr>
<td>Jackie Midgarden</td>
<td>Instructional Coach</td>
<td>Grafton Public Schools</td>
</tr>
<tr>
<td>Jaclyn Miller</td>
<td>Early Childhood Special Education Teacher</td>
<td>Fargo Public Schools</td>
</tr>
<tr>
<td>Tracy Mittleider</td>
<td>Preschool and Elementary Teacher</td>
<td>Zeeland Public School</td>
</tr>
<tr>
<td>Dawnita Nilles</td>
<td>Director</td>
<td>University Children’s Learning Center</td>
</tr>
<tr>
<td>Nicole Nissen</td>
<td>Education Disabilities Coordinator</td>
<td>West River Head Start</td>
</tr>
<tr>
<td>Jennifer Prince</td>
<td>CQI Coordinator</td>
<td>Child Care Aware of ND</td>
</tr>
<tr>
<td>Faith Rieger</td>
<td>Preschool Teacher</td>
<td>Richland Public School</td>
</tr>
<tr>
<td>Molly Syvertson</td>
<td>Kindergarten Teacher</td>
<td>Park River Area Elementary School</td>
</tr>
<tr>
<td>Carmen Traeholt</td>
<td>Youth Development Center Director</td>
<td>Missouri Valley Family YMCA</td>
</tr>
<tr>
<td>Danlyn VanderWal</td>
<td>Preschool Teacher</td>
<td>Hazelton-Moffit-Braddock School</td>
</tr>
<tr>
<td>Kristen Votava</td>
<td>Early Intervention</td>
<td>State Technical Assistance Provider</td>
</tr>
<tr>
<td>Kelli Odden</td>
<td>Professor</td>
<td>Mayville State University</td>
</tr>
</tbody>
</table>
Project Support Staff

Valerie Bakken  
Assistant Director, Office of Early Learning  
Section 619 Coordinator  
600 E Blvd Ave, Dept. 201  
Bismarck ND 58505-0440  
701-328-2720

Amanda Carlson  
Children & Family Services Administrator  
Part C Coordinator, DD Division  
1237 W Divide Ave, Suite 1A  
Bismarck ND 58501  
701-328-8936

Ben Cronkright  
Facilitator  
North Central Comprehensive Center at McREL International  
4601 DTC Blvd, Suite 500  
Denver, CO 80237  
303-632-5521

Rebecca Eberhardt  
Head Start/Early Head Start Collaboration Administrator, Office of Early Learning  
600 E. Boulevard Ave., Dept. 201  
Bismarck, ND 58505-0440  
701-328-1640

Tara Fuhrer  
Director, Office of Early Learning  
600 E. Boulevard Ave., Dept. 201  
Bismarck, ND 58505-0440  
701-328-4646

Dale Lewis  
Facilitator  
North Central Comprehensive Center at McREL International  
4601 DTC Blvd, Suite 500  
Denver, CO 80237  
303-632-5522

Diana Weber  
Interim Early Childhood Services Administrator  
Children and Family Services  
600 E Blvd Ave, Dept. 325  
Bismarck ND 58505-0250  
701-328-4809

Kelly Schultz  
Training and Technical Assistance Systems Specialist, R8 Head Start  
1960 Stout St  
Denver, CO 80294  
303-844-3100
Dear Colleagues:

On behalf of North Dakota’s Department of Public Instruction and the Department of Human Services, we are proud to jointly present the North Dakota Early Learning Standards Birth to Kindergarten. These new Standards were created by North Dakota Early Care and Education professionals, keeping in mind, that parents are a child’s first educator.

Early Care and Education professionals across North Dakota reviewed the Standards to assure that they are appropriate for children with varying abilities and for children with diverse cultural and linguistic backgrounds. Furthermore, a statewide review and comment process occurred that encouraged all North Dakota citizens to participate in the standard writing process.

North Dakota’s Early Learning Standards Birth to Kindergarten present a continuum of learning and development in the following domains: Approaches to Play and Learning; Social and Emotional Development; Language, Communication, and Literacy; Mathematics and Logical Thinking; Scientific Reasoning; Social Studies; Creative Arts; and Perceptual, Motor, and Physical Development.

The Standards promote the understanding of early learning and development; provide comprehensive and a coherent set of expectations for children’s development and learning; and guide the design and implementation of curriculum, assessment, and instructional practices with young children.

We would like to express our sincere gratitude to the professionals that contributed their time and talent to the creation of the North Dakota Early Learning Standards Birth to Kindergarten. These professionals were supported by our staff from the Department of Public Instruction and Department of Human Services, along with technical experts from the Head Start National Technical Assistance Center and the North Central Comprehensive Center.

It is up to all of us as parents, educators, and community partners to meet the strengths and needs of North Dakota children to achieve the goals set forth in these Standards.

Kirsten Baesler
State Superintendent
North Dakota Department of Public Instruction

Chris Jones
Executive Director
North Dakota Department of Human Services
# Table of Contents

**Domain I: Approaches to Play and Learning** .................................................................................................................................................................................................. 16
- Sub-Domain: Emotional and Behavioral Self-Regulation ................................................................................................................................. 18
- Sub-Domain: Cognitive Self-Regulation ............................................................................................................................................................................................ 22
- Sub-Domain: Initiative and Curiosity ................................................................................................................................................................................................ 26
- Sub-Domain: Creativity ..................................................................................................................................................................................................................... 28

**Domain II: Social and Emotional Development** .............................................................................................................................................................................................. 30
- Sub-Domain: Relationships with Adults ............................................................................................................................................................................................ 32
- Sub-Domain: Relationships with Other Children .............................................................................................................................................................................. 35
- Sub-Domain: Emotional Functioning ......................................................................................................................................................................................... 38
- Sub-Domain: Sense of Identity and Belonging ................................................................................................................................................................................. 42

**Domain III: Language, Communication, and Literacy** ................................................................................................................................................................................. 46
- Sub-Domain: Language – Attending and Understanding ................................................................................................................................................................. 49
- Sub-Domain: Language – Communicating and Speaking ................................................................................................................................................................. 51
- Sub-Domain: Language – Vocabulary ............................................................................................................................................................................................... 55
- Sub-Domain: Language – Emergent Literacy .................................................................................................................................................................................... 57
- Sub-Domain: Literacy - Phonological Awareness .............................................................................................................................................................................. 60
- Sub-Domain: Literacy – Print and Alphabet Knowledge ................................................................................................................................................................... 61
- Sub-Domain: Literacy – Comprehension and Text Structure ........................................................................................................................................................... 63
- Sub-Domain: Literacy – Writing ........................................................................................................................................................................................................ 65

**Domain IV: Cognition** .............................................................................................................................................................................................................. 66
- Sub-Domain: Cognition – Exploration and Discovery ............................................................................................................................................................... 69
- Sub-Domain: Cognition – Memory ................................................................................................................................................................................................. 70
- Sub-Domain: Cognition – Reasoning and Problem Solving ....................................................................................................................................................................... 72
- Sub-Domain: Cognition – Emergent Mathematical Thinking ........................................................................................................................................................... 74
- Sub-Domain: Cognition – Imitation and Symbolic Representation and Play ..................................................................................................................... 76
Introduction

The North Dakota Department of Public Instruction and the North Dakota Department of Human Services are pleased to introduce the 2018 North Dakota Early Learning Standards Birth to Kindergarten, hereafter referred to as "Standards". The North Dakota Early Learning Standards Birth to Kindergarten 2018 edition replaces North Dakota Early Learning Guidelines Birth through Age 3, North Dakota Early Learning Guidelines Ages 3 through 5, and the North Dakota Pre-Kindergarten Content Standards.

The first five years of life is a time of wondrous development and learning. Children grow from infants communicating through babbling and crawling on all fours - to toddlers speaking short sentences and beginning to run - to preschoolers telling detailed stories and kicking a ball to a friend. All young children learn in the context of caring, responsive, and stimulating relationships as they explore the world around them.

Yet, the quality of their early experiences can vary dramatically, and this can influence their learning and development. For example, by three years of age, some children have large vocabularies and others have much smaller ones. These differences usually reflect the everyday language experiences that children have with adults as well as other experiential and developmental factors. Such differences can have a lasting impact on later school success. Early childhood programs must create stimulating learning environments and implement intentional teaching strategies that ensure all children are ready to succeed in school.

Intentions

Parents, teachers, caregivers, health providers, social service providers, parent and family educators, early childhood educators, community members, and policymakers share responsibility for the healthy development of young children.

The Standards were developed through a collaborative effort with North Dakota Early Care and Education professionals. The Standards were guided in part, by comments received during a statewide public comment and review period and were subjected to multiple levels of review by the North Dakota Standards Writing Team, national technical assistance personnel, and state experts in the early childhood educational field. The Standards are grounded in a comprehensive body of research including the Head Start Early Learning Outcomes Framework: Ages Birth to Five as well as National Arts Standards, Colorado Early Learning and Development Guidelines, and Kansas Early Learning Creative Arts Standards. It describes how children progress across key areas of learning and development and specifies learning outcomes in these areas.

The Standards are not designed to be used as a curriculum, assessment, or checklist. They are never to be used to conclude a child has failed in any way or that a child is not ready to transition into kindergarten.

The Standards describe the skills, behaviors, and knowledge that all young children should know and be able to do to succeed in school. This information will help adults better understand what they should be doing to provide effective learning experiences that support important early learning outcomes.

The Standards provide a common set of expectations for children’s learning and development or what children should know and be able to do from birth to kindergarten across various types of early learning settings, as young children are cared for, nurtured and educated in a variety of settings, including their own homes; family, friend, and neighbor homes; family child care homes; child care centers; and Early Head Start/Head Start, and preschool programs.
Programs use the Standards to inform choices in curriculum and learning materials, to plan daily activities, and to inform intentional teaching practices. Aligning instruction and opportunities for play, exploration, discovery, and problem-solving with the early learning outcomes described in the Standards will promote successful learning in all children.

The Standards serve as a guide to engage families and early care and education professionals in planning and implementing developmental learning activities that emphasize a balance of play and structure to prepare children for the expectations of kindergarten.

The Standards serve as a resource for policymakers on the importance of play, early learning, and child development to ensure well-informed decision making on issues that may have an impact on young children.

Finally, the Standards are intended to be a living document; a review of the Standards may become necessary to assure that the Standards reflect the most current and comprehensive research on early childhood.

**Guiding Principles**

The guiding principles underlie the program policies and practices that prepare young children for success.

- **Families are children's first and most important caregivers, teachers, and advocates.** Families are valued and supported as the primary influence in their child's early learning and education. Their knowledge, skills, and cultural backgrounds contribute to children's school readiness.

- **Each child is unique and can succeed.** Children are individuals with different rates and paths of development. Each child is uniquely influenced by their prenatal environment, temperament, physiology, and life experiences. With the appropriate support, all children can be successful learners and achieve the skills, behaviors, and knowledge described in the Standards.

- **Learning occurs within the context of relationships.** Caring families, teachers, and other adults matter in a young child's life. Responsive and supportive interactions with adults are essential to children's learning.

- **Children learn best when they are emotionally and physically safe and secure.** Nurturing, responsive, and consistent care helps create safe environments where children feel secure and valued. In these settings, children are able to engage fully in learning experiences.

- **Areas of development are integrated, and children learn many concepts and skills at the same time.** Any single skill, behavior, or ability may involve multiple areas of development. For example, as infants gain fine motor skills, they can manipulate objects in new ways and deepen their understanding of cause and effect. As preschoolers gain new verbal skills, they can better manage their emotions and form more complex friendships.
- **Teaching is intentional and focused on how children learn and grow.** Children are active, engaged, and eager learners. Good teaching practices build on these intrinsic strengths by providing developmentally appropriate instruction and opportunities for exploration and meaningful play.

- **Every child has diverse strengths rooted in their family's culture, background, language, and beliefs.** Responsive and respectful learning environments welcome children from diverse cultural and linguistic backgrounds. Effective teaching practices and learning experiences build on the unique backgrounds and prior experiences of each child.

**Key Components of This Document**
The Standards are organized into the following elements: **Domains, Sub-Domains, Goals, Developmental Progressions, and Indicators**

- **EVIDENCE-BASED** - Informed by research as being reasonably achievable, age appropriate, and aligned with kindergarten expectations.

- **COMPREHENSIVE** - Cover the central domains of early learning and skills children need to succeed in school and provide sufficient breadth and depth in each area.

- **INCLUSIVE** - Relevant for children with disabilities, from diverse linguistic, economic, and cultural backgrounds.

- **MANAGEABLE** - Include a reasonable number of domains, sub-domains, goals, and indicators that programs can effectively implement.

- **MEASURABLE** - Reflect observable skills, behaviors, and concepts.

**Domains**
The **Domains** are broad areas of early learning and development from birth to 5 years that are essential for school and long-term success. The central domains are:

- Approaches to Play and Learning
- Social and Emotional Development
- Language, Communication, and Literacy
- Cognition
- Social Studies
- Creative Arts
- Perceptual, Motor, and Physical Development

Each domain is related to and influences the others. For example, as preshoolers' working memory develops (a component of Approaches to Play and Learning), their ability to follow multiple-step instructions improves, and their ability to learn complex math concepts increases.
Sub-Domains
The Sub-Domains are categories or components of development within a domain. For example, for the Social and Emotional Development domain, sub-domains include relationships with adults, relationships with other children, emotional functioning, and belonging.

Goals
The Goals are broad statements of expectations for children’s learning and development. The goals describe broad skills, behaviors, and concepts within a sub-domain that are important for success in school.

Developmental Progressions
The Developmental Progressions describe the skills, behaviors, and concepts that children will demonstrate as they progress towards a given goal within an age period. The term “emerging skills” is used for the youngest infant age group when specific skills, behaviors, or concepts have not yet emerged or are not yet observable.

Indicators
Indicators are identified for each goal for children 36 months and 60 months of age. They describe specific, observable skills, behaviors, and concepts that children should know and be able to do at the end of 36 months or at the end of 60 months. Given children’s individual differences, some children may demonstrate these indicators before the designated age period and some may demonstrate them later. The indicators listed for each age are not exhaustive - other indicators related to the goal may be observed.
Goal IT-APL 1. Child manages feelings and emotions with support of familiar adults. (0-36 months)
Goal P-APL 1. Child manages emotions with increasing independence. (36-60 months)

<table>
<thead>
<tr>
<th>Developmental Progressions</th>
<th>Birth-9 Months</th>
<th>8-18 Months</th>
<th>16-36 Months</th>
<th>36-48 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Engages with familiar adults for calm and comfort, to focus attention, and to share joy.</td>
<td>Seeks to be close, makes contact, or looks to familiar adults for help with strong emotions.</td>
<td>Uses various strategies to help manage strong emotions, such as removing oneself from the situation, covering eyes or ears, or seeking support from a familiar adult.</td>
<td>Manages less intense emotions, such as mild frustration, independently. May require adult support to manage more intense emotions.</td>
</tr>
<tr>
<td></td>
<td>Indicators:</td>
<td>Indicators:</td>
<td>Indicators:</td>
<td>Indicators:</td>
</tr>
<tr>
<td>By 36 Months:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Looks to others for help in coping with strong feelings and emotions.</td>
<td>- Expresses emotions in ways that are appropriate for the situation.</td>
<td>- Looks for adult assistance when emotions are intense.</td>
<td>- Uses a range of coping strategies to manage intense emotions with the support of adults.</td>
<td></td>
</tr>
<tr>
<td>- Uses strategies, such as seeking contact with a familiar adult or removing oneself from a situation, to handle strong feelings and emotions.</td>
<td>- Uses strategies, such as seeking contact with a familiar adult or removing oneself from a situation, to handle strong feelings and emotions.</td>
<td>- Uses a range of coping strategies to manage intense emotions with the support of adults.</td>
<td>- Expresses emotions in ways that are appropriate for the situation.</td>
<td></td>
</tr>
</tbody>
</table>

(P) Preschool
(IT) Infant Toddler
(APL) Domain
## Domain Organization and Alignment to North Dakota Kindergarten Standards

<table>
<thead>
<tr>
<th>Central Domains</th>
<th>Infants/Toddlers</th>
<th>Preschool</th>
<th>Kindergarten–12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approaches to Play and Learning</td>
<td>Approaches to Play and Learning</td>
<td>21st Century Learning Skills</td>
<td></td>
</tr>
<tr>
<td>Social and Emotional Development</td>
<td>Social and Emotional Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language, Communication, and Literacy</td>
<td>Language, Communication, and Literacy</td>
<td>English Language Arts</td>
<td></td>
</tr>
<tr>
<td>Cognition</td>
<td>Cognition</td>
<td>Mathematics Development</td>
<td>Mathematics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scientific Reasoning</td>
<td>Science</td>
</tr>
<tr>
<td>Social Studies</td>
<td>Social Studies Embedded</td>
<td>Social Studies</td>
<td></td>
</tr>
<tr>
<td>Arts</td>
<td>Creative Arts Embedded</td>
<td>Creative Arts</td>
<td>Arts</td>
</tr>
<tr>
<td>Perceptual, Motor, and Physical Development</td>
<td>Perceptual, Motor, and Physical Development</td>
<td></td>
<td>Health</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Physical Education</td>
</tr>
</tbody>
</table>
Children with Varying Abilities
It is essential that programs identify the strengths and abilities of all children to ensure that learning opportunities are maximized and that all children are fully included in every educational experience and activity. Children with disabilities may need more individualized or intensive instruction to develop and learn the skills, behaviors, and concepts described in the Standards. The same applies to children that are developing skills faster than their peers. Children with special needs may require accommodations in the environment or in instructional strategies. Some may require adaptive materials or assistive technology, while others may need to be challenged. Programs need to use the Standards in close collaboration with specialists identified on a child’s Individual Family Service Plan (IFSP), or Individualized Education Program (IEP).

Dual Language Learners/English Learners
Children who are dual language learners (DLLs) are growing up with more than one language. The foundation for language development is set in utero as babies process and store the sounds of the languages in their environment. The continued development of a child’s home language in the family and early childhood program is an asset and will support the child’s progress in all areas of learning. For example, there are cognitive benefits, particularly in the area of executive functioning, to children’s dual language learning. Young children who speak multiple languages also benefit socially as they can create relationships in their languages while also maintaining strong ties with their family, community, and culture. Children’s progress in learning English will vary depending on their past and current exposure to English, their age, temperament, and other factors. Intentional planning at the program and classroom level is necessary. Teaching practices are designed to create learning environments that support children’s diversity and use proven strategies that promote home language(s) and English acquisition. The learning outcomes of children who are DLLs are best supported with opportunities to interact and learn in each of their developing languages. Programs must ensure that children who are DLLs progress in each area of learning and development in the Standards while also promoting English acquisition. Children who are DLLs must be allowed to demonstrate the skills, behaviors, and knowledge in the Standards in their home languages, English, or each language.

Infants and Toddlers
Experiences in the first three years of life have a strong impact on brain development and learning. They are the foundation for healthy development and strong child outcomes in the preschool years and beyond. In the Standards, developmental progress in key learning areas for infants and toddlers is presented in three age groups: birth to 9 months, 8 to 18 months, and 16 to 36 months. These age groups reflect common shifts or transitions in development. The overlapping months recognize that infants and toddlers grow and develop at different rates. The Standards also provide specific skills, behaviors, and concepts that children should demonstrate by 36 months.

Preschoolers
From 3 to 5 years of age, experiences continue to have a strong impact on brain development and learning. Children build on their earlier experiences to learn even more complex ways of communicating, relating, exploring, and understanding the world around them. Areas of learning during this age period become more specific and differentiated. This depth is reflected in the Standards. Preschoolers’ developmental progression is described across two age groups: 36 to 48 months (3 to 4 years) and 48 to 60 months (4 to 5 years). The Standards also identify specific skills, behaviors, and concepts that children at 60 months of age should know and be able to do.
Using the Standards
The Standards outline the key areas and expectations for child development and learning that programs must use to:
- Plan teaching strategies and learning environments
- Establish school readiness goals
- Select curricula
- Select assessments
- Tailor professional development
- Inform program planning, improvement, and implementation

The Standards are a guide to foster implementation of effective teaching and program practices in family, friend and neighbor homes; family child care homes; child care centers; and Early Head Start/Head Start, and preschool programs. It includes domains of learning most central to school success and presents a common set of expectations in these key learning areas.

This targeted focus is designed to ensure that learning experiences and environments are delivered with utmost intentionality to promote strong child outcomes.

The Standards also can be a helpful tool for effective engagement with families. Programs can use the Standards to convey the importance of adults talking with infants starting at birth, using turn taking and two-way communication. Teachers and parents can use the Standards to discuss skills children are developing and to identify strategies that support and reinforce children’s learning and development in the home and community. Programs that use the Standards in partnership with families will benefit from the family’s knowledge of the child’s development, interests, and prior communication. Teachers and parents can use the Standards to discuss skills children are developing and to identify strategies that support and reinforce experiences. Programs then can implement more individualized learning opportunities that promote strong child outcomes.

The Standards, in combination with teachers’ and caregivers’ knowledge and understanding of each child’s cultural background, ensures that children’s unique ways of learning are recognized.

Children are engaged and eager learners from birth. Effective early childhood programs build on children’s readiness to learn by creating stimulating and safe environments and supporting positive adult-child relationships. Aligning teaching and program practices with the learning outcomes in the Standards will promote more effective educational experiences and stronger child outcomes. Thoughtfully-designed practices motivate and excite children and foster their internal desire to learn. Implementing the Standards will assist programs in their efforts to ensure all children become successful learners.

Emerging Skills: Skills that are just beginning to show, measuring these skills or nurturing them. These are noted throughout the document and labeled as Emerging Skills in the Developmental Progression.

Continued Growth: A stage in the process of growing. These are noted throughout the document and labeled as Continued Growth in the Developmental Progression.
Case Studies Description: The case studies provide information about domain specific examples of indicators that support children’s development. These are not intended to be an exhaustive list, but rather guide parents, caregivers, and teachers in the interpretation and application of the indicator. They also help staff reflect on and improve their teaching practices. In home-based settings, teaching practices are the ways that home visitors work with families to provide experiences that support the child’s development and learning, engage in responsive interactions, and use the home as the learning environment.
Domain I: Approaches to Play and Learning

Sub-Domains:

- Emotional and Behavioral Self-Regulation
- Cognitive Self-Regulation
- Initiative and Curiosity
- Creativity

Approaches to Play and Learning focuses on how children learn. It refers to the skills and behaviors that children use to engage in learning.

The Approaches to Play and Learning domain incorporates emotional, behavioral, and cognitive self-regulation under a single umbrella to guide teaching practices that support the development of these skills. This domain also includes initiative, curiosity, play, and creativity. Supporting children's development in this domain helps children acquire knowledge, learn new skills, and set and achieve goals. They learn to successfully navigate learning experiences that are challenging, frustrating, or simply take time to accomplish. How children engage in learning influences development in all domains and directly contributes to success in school.

An important part of becoming a successful learner is developing the ability to self-regulate in a variety of situations. In infancy, self-regulation occurs within the context of consistent, responsive relationships. In the next few years, the child becomes a more active agent, though adults still provide guidance. Children draw on emotional and behavioral self-regulation skills in many ways. They develop different coping strategies to manage feelings when playing with other children and when following classroom rules. This growing ability for children to manage emotions and behavior allows for more positive engagement in learning activities.

Children also develop cognitive self-regulation skills - often referred to as executive functioning. These skills include sustained attention, impulse control, and flexibility in thinking. Another related skill is working memory, the ability to hold information and manipulate it to perform tasks. Executive functioning skills are present in basic form during the infant and toddler years and develop even more in the preschool years. For example, children become increasingly able to rely on their memory to recount past experiences in detail and follow multi-step directions. Whether climbing onto a couch to retrieve a toy, building increasingly elaborate block structures, or deciding on the roles in pretend play, young children draw upon their curiosity, persistence, and creativity to gather information and solve problems.

Many factors influence how children approach play and learning. Some children seem to be born risk takers who are eager to try something new, others prefer to observe for a while. As children with disabilities learn, they may require more individualized instruction and accommodations to aid with sustained attention or regulation of feelings.
<table>
<thead>
<tr>
<th>Case Studies</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| **Young Infant**  
(Birth to 9 months) | **Older Infant**  
(8 to 18 months) | **Toddler**  
(16 to 36 months) | **Preschool**  
(36 to 48 months) | **Preschool**  
(48 to 60 months) |
| Eli, 3 months, is a new child in the infant room. Ms. Williams, his primary caregiver, learned from his family what techniques work best to calm Eli when he is upset. Today, a loud noise from the street suddenly wakes Eli and he starts to cry. Ms. Williams lifts him from his crib and holds him close, swaying from side to side until he relaxes and returns to sleep. | The infants and their parents are dancing to some lively music. Ms. Stanhope holds her 10-month-old daughter, Daria, and together they move and sway. Daria laughs and waves her arms. After a few minutes, Daria's expression changes. She arches her back and makes a pouty face. Ms. Stanhope says, "I think you've had enough dancing. Let me put you down so you can take a break." Ms. Unger, their home visitor, comments, "Daria was telling you that she wanted a change. You saw her cues and responded to them by putting her down." | Graham, 28 months, puts the last piece in his puzzle and jumps up, shouting, "All done!" Mr. Troy, his father, says, "Graham, you love doing puzzles. You feel happy when you get one done. It's nice to feel happy. Do you want to do another puzzle?" Ms. Drew, their home visitor comments to the caregiver "I noticed Anna holding the egg carefully when she cracked it. Then she carefully pulled the egg shell apart to get the egg in the bowl. And then I saw her smile." | The home visitor observes Ana, 38 months, and the caregiver, as they participate in making whole wheat muffins during a group socialization activity. The home visitor comments to the caregiver "I noticed Anna holding the egg carefully when she cracked it. Then she carefully pulled the egg shell apart to get the egg in the bowl. And then I saw her smile." | After a baking activity in the older 4-year-olds and young 5-year-olds class, Ms. Healy notices the children making loaves of bread with playdough. She adds baking props to the dramatic play area. Soon, the children discover the pie tins, chef hats, pot holders, rolling pins, and cookie cutters. They spend several days baking treats. Ms. Healy mentions, "These baked goods are so delicious you could serve them in a café." The following day, the children set up a coffee shop. |
**Sub-Domain: Emotional and Behavioral Self-Regulation**

**Goal IT-APL 1.** Child manages feelings and emotions with support of familiar adults. (0-36 months)

**Goal P-APL 1.** Child manages emotions with increasing independence. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engages with familiar adults for calming and comfort, to focus attention, and to share joy.</strong></td>
<td>Seeks to be close, makes contact, or looks to familiar adults for help with strong emotions.</td>
<td>Uses various strategies to help manage strong emotions, such as removing oneself from the situation, covering eyes or ears, or seeking support from a familiar adult.</td>
<td>Manages less intense emotions, such as mild frustration, independently. May require adult support to manage more intense emotions.</td>
<td>Has an expanding range of strategies for managing emotions, both less intense emotions as well as those that cause greater distress. May still look to adults for support in managing the most intense emotions but shows increasing skill in successfully using strategies suggested by adults.</td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

**By 36 Months:**
- Looks to others for help in coping with strong feelings and emotions.
- Uses strategies, such as seeking contact with a familiar adult or removing oneself from a situation, to handle strong feelings and emotions.

**By 60 Months:**
- Expresses emotions in ways that are appropriate to the situation.
- Looks for adult assistance when emotions are most intense.
- Uses a range of coping strategies to manage emotions with the support of an adult, such as using words or taking deep breaths.
**Goal IT-APL 2.** Child manages actions and behavior with support of familiar adults. (0-36 months)

**Goal P-APL 2.** Child follows classroom rules and routines with increasing independence. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Responds to attentive caregiving by quieting or calming down, such as when being fed or being comforted during moments of physical distress.</td>
<td>Looks to familiar adults for assistance and guidance with actions and behavior. May try to calm self by sucking on fingers or thumb when overly excited or distressed.</td>
<td>Begins to manage and adjust actions and behavior with the guidance of familiar adults using words or signs such as &quot;Stop&quot; or &quot;No&quot; during conflict with a peer instead of hitting. Let's the adult know when they are hungry or tired.</td>
<td>Follows simple rules and routines with assistance from adults, such as hanging up their coat or sitting at the table when asked by an adult.</td>
<td>Usually follows classroom rules and routines with occasional reminders from adults, such as following an end-of-lunch routine that includes putting away their plate, washing hands, and lining up at the door to go outside.</td>
</tr>
</tbody>
</table>

### Indicators

**By 36 Months:**
- Participates in and follows everyday routines with the support of familiar adults.
- Communicates verbally or non-verbally about basic needs.
- Manages short delays in getting physical needs met with the support of familiar adults.
- Learns and follows some basic rules for managing actions and behavior in familiar settings, such as holding an adult's hand when crossing the street.

**By 60 Months:**
- Demonstrates awareness of classroom rules when asked and is able to follow these rules most of the time.
- Follows most classroom routines, such as putting away backpack when entering the room or sitting on the rug after outside time.
- Responds to signals when transitioning from one activity to another.
**Goal P-APL 3.** Child appropriately handles and takes care of classroom materials. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Handles classroom materials, such as putting them where they belong, with adult support.</td>
<td>Usually handles, takes care of, and manages classroom materials, such as using them in appropriate ways and not throwing them from the sensory table onto the floor.</td>
</tr>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Appropriately handles materials during activities.
- Cleans up and puts materials away appropriately, such as places blocks back on correct shelf or places markers in the correct bin.
**Goal P-APL 4.** Child manages actions, words, and behavior with increasing independence. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manages own actions, words, and behavior with frequent support from adults, such as reminders to use gentle touches and friendly words.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Manages own actions, words, and behavior with occasional support from adults.</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Demonstrates control over actions and words in response to a challenging situation, such as wanting to use the same materials as another child, or frustration over not being able to climb to the top of a structure. May need support from adults.
- Manages behavior according to expectations, such as using quiet feet when asked or sitting on the rug during circle time.
- Waits for turn, such as waits in line to wash hands or waits for turn on swings.
- Refrains from aggressive behavior towards others.
- Begins to understand the consequences of behavior, such as hitting leads to an adult giving you quiet time. Can describe the effects their behavior may have on others, such as noticing that another child feels sad when you hit him.
### Sub-Domain: Cognitive Self-Regulation

**Goal IT-APL 3.** Child maintains focus and sustains attention with support. (0-36 months)
**Goal P-APL 6.** Child maintains focus and sustains attention with minimal adult support. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Develops some ability to filter out distracting sensory stimuli in order to focus on and attend to important people or objects in the environment with support.</td>
<td>Shows increasing ability to attend to people, objects, and activities in order to extend or complete an activity, or to join.</td>
<td>Participates in activities and experiences with people, objects, or materials that require attention and common focus.</td>
<td>With adult support, focuses attention on tasks and experiences for short periods of time, despite interruptions or distractions.</td>
<td>With increasing independence, focuses attention on tasks and experiences for longer periods of time, despite interruptions or distractions.</td>
</tr>
</tbody>
</table>

#### Indicators

**By 36 Months:**
- Maintains engagement in interactions with familiar adults and children.
- Chooses to join in activities or pays attention to tasks and activities that are self-initiated.
- Maintains focus and attention on a simple task or activity for short periods of time.

**By 60 Months:**
- Maintains focus on activities for extended periods of time, such as 15 minutes or more.
- Engages in purposeful play for extended periods of time.
- Attends to adult during large and small group activities with minimal support.
**Goal IT-APL 4.** Child develops the ability to show persistence in actions and behavior. (0-36 months)

**Goal P-APL 7.** Child persists in tasks. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shows increasing ability to continue interactions with familiar adults or toys for more than just a brief time.</td>
<td>Shows willingness to repeat attempts to communicate or to repeat actions to solve a problem even when encountering difficulties.</td>
<td>Shows increasing ability to stay engaged when working towards a goal or solving a problem. Often tries different strategies until successful.</td>
<td>Persists on preferred tasks when presented with small challenges with or without adult support, such as continuing to try to build a tall tower with blocks, even when some pieces fall.</td>
<td>Frequently persists on preferred tasks. Sometimes persists on less preferred activities with or without adult support, such as working to clean up an activity area.</td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

**By 36 Months:**
- Persists in learning new skills or solving problems.
- Continues efforts to finish a challenging activity or task with support of an adult.

**By 60 Months:**
- Completes tasks that are challenging or less preferred despite frustration, either by persisting independently or seeking help from an adult or other child.
- Returns with focus to an activity or project after having been away from it.
Goal IT-APL 5. Child demonstrates the ability to be flexible in actions and behavior. (0-36 months)
Goal P-APL 5. Child demonstrates an increasing ability to control impulses. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shows repetitive patterns in actions or behaviors but sometimes tries more than one approach to solving a problem or engaging someone in interaction.</td>
<td>Shows ability to shift focus in order to attend to something else, participate in a new activity or try a new approach to solving a problem.</td>
<td>Modifies actions or behavior in social situations, daily routines, and problem solving, such as playing quietly when asked or adjusting to changes in schedule.</td>
<td>Frequently engages in impulsive behaviors but inhibits them when directly supported by an adult.</td>
<td>Sometimes controls impulses independently, while at other times needs support from an adult.</td>
</tr>
</tbody>
</table>

### Indicators

#### By 36 Months:
- Adjusts to changes in routines or usual activities when informed ahead of time by adults.
- Makes common, everyday transitions that are part of a daily schedule.
- Shows flexibility in problem solving by trying more than one approach.

#### By 60 Months:
- Tries different strategies to complete work or solve problems, including with other children.
- Applies different rules in contexts that require different behaviors, such as using indoor voices or feet instead of outdoor voices or feet.
- Transitions between activities without getting upset.

Goal P-APL 8. Child holds information in mind and manipulates it to perform tasks. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Emerging Skills</td>
<td>Holds small amounts of information in mind, such as two-step directions, to successfully complete simple tasks.</td>
<td>Holds an increasing amount of information in mind in order to successfully complete tasks.</td>
<td></td>
</tr>
</tbody>
</table>

### Indicators

#### By 60 Months:
- Accurately recounts recent experiences in the correct order and includes relevant details.
- Successfully follows detailed, multi-step directions, sometimes with reminders.
- Remembers actions to go with stories or songs shortly after being taught.
Goal P-APL 9. Child demonstrates flexibility in thinking and behavior. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td>Demonstrates flexibility, or the ability to switch gears, in thinking and behavior when prompted by an adult, such as trying a new way to climb a structure when the first attempt does not work.</td>
<td>Demonstrates flexibility in thinking and behavior without prompting at times. Also responds consistently to adult suggestions to show flexibility in approaching tasks or solving problems, such as taking turns to share toys when many children want to use them.</td>
</tr>
</tbody>
</table>

Indicators

- By 60 Months:
  - Tries different strategies to complete work or solve problems, including with other children.
  - Applies different rules in contexts that require different behaviors, such as using indoor voices or feet instead of outdoor voices or feet.
  - Transitions between activities without getting upset.
Sub-Domain: Initiative and Curiosity

**Goal IT-APL 6.** Child demonstrates emerging initiative in interactions, experiences, and explorations. (0-36 months)

**Goal P-APL 10.** Child demonstrates initiative and independence. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiates interactions with familiar adults through expressions, actions, or behaviors.</td>
<td>Points to desired people, objects, or places. Initiates actions, such as looking for a favorite toy or bringing a book to an adult to read. Actively resists actions or items not wanted.</td>
<td>Prepares for or starts some activities without being directed by others, such as getting ready for the next activity or bringing a ball to a new child at the playground.</td>
<td>Regularly shows initiative, particularly in interactions with familiar adults. Works independently for brief periods of time without adult prompting.</td>
<td>Frequently shows initiative, particularly when engaged in preferred activities. Demonstrates a willingness and capability to work independently for increasing amounts of time.</td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

**By 36 Months:**
- Engages others in interactions or shared activities.
- Demonstrates initiative by making choices or expressing preferences.
- Attempts challenging tasks with or without adult help.
- Shows eagerness to try new things.

**By 60 Months:**
- Engages in independent activities.
- Makes choices and communicates these to adults and other children.
- Independently identifies and seeks things to complete activities or tasks, such as gathering art supplies to make a mask or gathering cards to play a matching activity.
- Plans play scenarios, such as dramatic play or construction, by establishing roles for play, using appropriate materials, and generating appropriate scenarios to be enacted.
**Goal IT-APL 7.** Child shows interest in and curiosity about objects, materials, or events. (0-36 months)

**Goal P-APL 11.** Child shows interest in and curiosity about the world around them. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shows excitement when engaged in learning, such as smiling at an adult, laughing after batting at a mobile, or knocking over a toy.</td>
<td>Approaches new events, experiences with others, or materials with interest and curiosity, such as intently listening to a new song or examining new toys or materials.</td>
<td>Participates in new experiences, asks questions, and experiments with new things or materials, such as collecting leaves and pinecones in the fall.</td>
<td>Seeks out new information and explores new play and tasks with adult support.</td>
<td>Seeks out new information and explores new play and tasks both independently and with adult support.</td>
</tr>
</tbody>
</table>

### Indicators

**By 36 Months:**
- Asks questions about what things are, how they are used, or what is happening.
- Experiments with different ways of using new objects or materials.
- Shows awareness of and interest in changes in the environment, such as changes in room arrangement, weather, or usual activities.

**By 60 Months:**
- Asks questions and seeks new information.
- Is willing to participate in new activities or experiences even if they are perceived as challenging.
- Demonstrates eagerness to learn about and discuss a range of topics, ideas, and activities.
### Sub-Domain: Creativity

**Goal IT-APL 8.** Child uses creativity to increase understanding and learning. (0-36 months)

**Goal P-APL 12.** Child expresses creativity in thinking and communication. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Uses a variety of ways to interact with other people.</strong></td>
<td>Finds new things to do with familiar, everyday objects, such as using a cooking pot for a hat or a spoon as a drumstick.</td>
<td>Combines objects or materials in new and unexpected ways. Shows delight in creating something new.</td>
<td>Responds to adults' prompts to express creative ideas in words and/or actions.</td>
<td>Communicates creative ideas and actions both with and without prompting from adults.</td>
<td></td>
</tr>
<tr>
<td><strong>Indicators</strong></td>
<td>By 36 Months:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Pays attention to new or unusual things.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Shows willingness to participate in new activities or experiences.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Uses language in creative ways, sometimes making up words or rhymes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Indicators</strong></td>
<td>By 60 Months:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Asks questions related to tasks or activities that indicate thinking about new ways to accomplish the task or activity.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Approaches tasks, activities, and play in ways that show creative problem solving.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Uses multiple means of communication (verbal and non-verbal) to creatively express thoughts, feelings, or ideas.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Goal IT-APL 9.** Child shows imagination in play and interactions with others. (0-36 months)

**Goal P-APL 13.** Child uses imagination in play and interactions with others. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
<td>Uses sounds, gestures, signs, or words playfully through songs, finger plays, or games.</td>
<td>Uses imagination to explore possible uses of objects and materials. Engages in pretend or make-believe play with other children.</td>
<td>Consistently uses imagination in play and other creative works. Begins to communicate creative ideas to other children and adults.</td>
<td>Develops more elaborate imaginary play, stories, and other creative works with children and adults.</td>
</tr>
</tbody>
</table>

### Indicators

**By 36 Months:**
- Uses pretend and imaginary objects or people in play or interaction with others.
- Uses materials such as paper, paint, crayons, or blocks to make novel things.

**By 60 Months:**
- Engages in social and pretend play.
- Uses imagination with materials to create stories or works of art.
- Uses objects or materials to represent something else during play, such as using a paper plate or Frisbee as a steering wheel.
Domain II: Social and Emotional Development

Sub-Domains

- Relationships with Adults
- Relationships with Other Children
- Emotional Functioning
- Sense of Identity and Belonging

Positive social and emotional development in the early years provides a critical foundation for lifelong development and learning.

Social development refers to a child’s ability to create and sustain meaningful relationships with adults and other children. Infants and toddlers develop relationship-building skills and behaviors through their earliest interactions with important adults in their lives. Children who develop trusting relationships with adults more fully explore and engage in the world around them. They know that the adults will support them in challenging times. Relationships with other children also may develop in the first three years of life. These relationships provide opportunities to practice skills learned from adults. These relationships also foster problem-solving skills as young children navigate the difficulties and joys of interacting with another child who has different wants and ideas. As children move into the preschool years, they become increasingly interested in forming relationships with peers. Critical social skills, such as compromise, cooperation, and sharing, are developing at this time. Young children need support from adults as they learn and practice these skills.

Emotional development refers to a child’s ability to express, recognize, and manage their own emotions as well as respond appropriately to others’ emotions. Emotional development in infants is closely tied to their social development with adults as well as to individual differences. These early relationships teach young children how to express and interpret a wide range of emotions. Though children express emotions at birth, the preschool years are a critical time for learning how to manage emotions in ways that can help children build strong social skills and get the most out of their time in the early childhood program. Preschoolers are developing more concrete ideas about their own identity—who they are and what they can do. A sense of identity and belonging contributes to school readiness and learning by helping children gain self-confidence. When children feel good about themselves and what they can do, they engage more fully in learning opportunities.

For many reasons, the rate and path of social and emotional development varies in young children. Cultural and linguistic backgrounds must be taken into account as well as individual differences. Some cultures encourage children to be outgoing, others to be reserved in social interactions and emotional expression. Children with disabilities may require more individualized instruction or accommodations. They may need intentional guidance from teachers to help them form friendships or to express their feelings.
## Case Studies

<table>
<thead>
<tr>
<th>Young Infant (Birth to 9 months)</th>
<th>Older Infant (8 to 18 months)</th>
<th>Toddler (16 to 36 months)</th>
<th>Preschool (36 to 48 months)</th>
<th>Preschool (48 to 60 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ariel, age 3 months, spends a lot of time staring at her mother’s face. She especially looks at her eyes and mouth. Mother and baby often have long moments locked in these mutual gazes. When Ariel’s mother talks to her, she quiets her body, listens intently and sometimes smiles. Ariel’s mother cut out some photos of baby faces from a magazine and put them on the refrigerator. Ariel likes to look at the photos when they walk by and mother talks with Ariel about what they see. She points to and identifies the eyes, nose and mouth.</td>
<td>Katy, age 15 months, has just met her new baby cousin, Laura. She is fascinated by what looks like a new baby doll! While her mother holds the baby, Katy pokes with her finger at the baby’s tummy and then touches Laura’s face. Then she looks at her own tummy and touches her own face. She is surprised when the baby starts to cry. Katy’s mother tells her to be gentle with the baby and they talk softly to quiet Laura. Katy starts to smile and then laughs and gives the baby a big hug.</td>
<td>Destiny, age 30 months, and Alex, age 28 months, are learning to play together and enjoy each other’s company. Their mothers often take them to the playground together. They usually play near each other although they may be doing different things. When Alex fell off the climber and started crying, Destiny ran to get her mother, even though Alex’s mother was right there. She knows from experience that her mother will comfort and take care of children when they are hurt.</td>
<td>Oliver, 44 months, wants to paint. &quot;Oh dear,&quot; says Ms. James. &quot;I know you want to paint today, Oliver, but all the easels are taken. I can’t let you push Omar out of your way because you might hurt him. Let’s practice what you could say to Omar instead of pushing him. I’ll pretend to be Omar, and you can tell me what you want.”</td>
<td>Jason and Renee, 55 months, are playing. The temperature is below zero today, so the children are using the indoor gross motor room for active play. Ms. Porter is teaching the children how to mirror dance. She asks Jason and Renee to be partners. Renee, who has been diagnosed on the autism spectrum, often gets frustrated when trying something new. Jason, on the other hand, listens attentively and follows directions with ease. Ms. Porter often pairs Jason and Renee together for new activities. She feels confident that, with her support, he will be able to lead Renee during the mirror dance.</td>
</tr>
</tbody>
</table>
**Sub-Domain: Relationships with Adults**

**Goal IT-SE 1.** Child develops expectations of consistent, positive interactions through secure relationships with familiar adults. (0-36 months)

**Goal P-SE 1.** Child engages in and maintains positive relationships and interactions with adults. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interacts in predictable ways with familiar adults. Responds positively to familiar adults' efforts to help with stressful moments.</td>
<td></td>
<td>Looks to familiar adults for emotional support and encouragement. Reacts or may become distressed when separated from familiar adults.</td>
<td>Engages in positive interactions in a wide variety of situations with familiar adults. Looks to or seeks familiar adults for comfort when distressed or tired.</td>
<td>Engages in positive interactions with adults, by demonstrating affection or talking about ideas. Is able to separate from trusted adults when in familiar settings. Uses adults as a resource to solve problems.</td>
<td>Clearly shows enjoyment in interactions with trusted adults while also demonstrating skill in separating from these adults with minimal distress when in a familiar setting. Initiates interactions with adults and participates in longer and more reciprocal interactions with both trusted and new adults.</td>
</tr>
</tbody>
</table>

**Indicators**

**By 36 Months:**
- Shows emotional connection and attachment to familiar adults.
- Turns to familiar adults for protection, comfort, and getting needs met.

**Indicators**

**By 60 Months:**
- Interacts readily with trusted adults.
- Engages in some positive interactions with less familiar adults, such as parent volunteers.
- Shows affection and preference for adults who interact with them on a regular basis.
- Seeks help from adults when needed.
**Goal IT-SE 2.** Child uses expectations learned through repeated experiences in primary relationships to develop relationships with other adults. (0-36 months)

**Goal P-SE 2.** Child engages in prosocial and cooperative behavior with adults. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shows recognition of familiar adults by turning head toward familiar voice, smiling, reaching, or quieting when held. May avoid or withdraw from unfamiliar adults.</td>
<td>Moves or stays close to familiar adults for emotional security when unfamiliar adult approaches. May look at familiar adults to gauge comfort level with unfamiliar adult.</td>
<td>Often watches from a distance or waits for reassurance from familiar adult before approaching someone new. May engage in positive interactions when meeting new people, such as sharing a book with a visitor.</td>
<td>Sometimes engages in prosocial behavior with adults, such as greeting the teacher or saying goodbye, and responds to adult requests and directions that may include assistance or prompting. Sometimes demonstrates uncooperative behavior with familiar adults, such as saying &quot;No&quot; to requests, but these moments are typically resolved with support from adults.</td>
<td>Often engages in prosocial behavior with adults and usually responds appropriately to adult requests and directions without significant assistance or prompting. Uncooperative behavior with familiar adults is rare and the child is able to resolve minor conflicts with adults with support, such as being given reminders to use a quiet voice or follow directions.</td>
</tr>
</tbody>
</table>

### Indicators

**By 36 Months:**
- Engages in and may initiate behaviors that build relationships with familiar adults.
- Uses familiar adults for reassurance when engaging with new adults.

**By 60 Months:**
- Engages in prosocial behaviors with adults, such as using respectful language or greetings.
- Attends to an adult when asked.
- Follows adult guidelines and expectations for appropriate behavior.
- Asks or waits for adult permission before doing something when they are unsure.
**Goal IT-SE 3.** Child learns to use adults as a resource to meet needs. (0-36 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicates needs to familiar adults by using a variety of behaviors, such as, crying, looking, smiling, pointing, dropping, reaching, or banging objects.</td>
<td>Looks to or seeks help from a familiar adult, such as taking the adult's hand and leading them to something the child wants or needs.</td>
<td>Asks familiar adult for help or assistance when encountering difficult tasks or situations.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Indicators

By 36 Months:
- Seeks assistance from familiar adults in new or difficult situations, such as reaching for a toy on a high shelf.
- Shows preference for familiar adults when in distress.
**Sub-Domain: Relationships with Other Children**

**Goal IT-SE 4.** Child shows interest in, interacts with, and develops personal relationships with other children. (0-36 months)

**Goal P-SE 3.** Child engages in and maintains positive interactions and relationships with other children. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Looks at attentively, touches or explores another child's face. Shows recognition of familiar children through actions or behaviors, such as smiling, reaching, touching, or making sounds directed to the child.</td>
<td>Participates in simple back-and-forth interactions with another child. Interacts with a few children on a regular basis, knows some of their names, likes or dislikes.</td>
<td>Seeks out other children for social interaction, including initiating contact and responding to others. Develops friendships and engages in more elaborate play with friends.</td>
<td>Sometimes engages in and maintains interactions with other children without support from an adult or demonstrates skills in doing this when prompted by an adult. May spontaneously engage in prosocial behaviors with other children, such as sharing and taking turns with materials and in conversations or may engage in these with prompting from adults.</td>
<td>Sustains interactions with other children more often and for increasing periods of time. Demonstrates prosocial behaviors with other children with and without prompting from adults. Likely to show at least some preference for playing with particular children.</td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

**By 36 Months:**
- Shows increasing interest in interacting with other children.
- Shows preference for particular playmates, such as greeting friends by name.

**By 60 Months:**
- Engages in and maintains positive interactions with other children.
- Uses a variety of skills for entering social situations with other children, such as suggesting something to do together, joining an existing activity, or sharing a toy.
- Takes turns in conversations and interactions with other children.
- Develops friendships with one or two preferred other children.
**Goal IT-SE 5.** Child imitates and engages in play with other children. (0-36 months)

**Goal P-SE 4.** Child engages in cooperative play with other children. (36-60 months)

## Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Responds to another child's actions or sounds during play with a toy by watching attentively, touching the other child, or reaching for or taking the toy.</td>
<td>Participates in simple imitation games, such as making similar sounds or running after another child. Plays next to other children with similar toys or materials.</td>
<td>Joins in play with other children by sometimes taking turns or doing joint activities with a common goal, such as building block structures with others or pretending to eat together.</td>
<td>Often plays cooperatively with other children. For at least short periods during this play, works with other children to plan and enact this play in a coordinated way.</td>
<td>Cooperatively plays with other children in an increasingly coordinated way. Works with other children to make plans for what and how they will play together. When given the opportunity, these coordinated play periods get longer.</td>
</tr>
</tbody>
</table>

### Indicators

**By 36 Months:**
- Uses multiple strategies, such as imitating or responding, in order to enter play with other children.
- Engages in simple cooperative play with other children.

**By 60 Months:**
- Engages in joint play, such as using coordinated goals, planning, roles, and games with rules, with at least one other child at a time.
- Demonstrates willingness to include others' ideas during interactions and play.
- Shows enjoyment of play with other children, such as through verbal exchanges, smiles, and laughter.
- Engages in reflection and conversation about past play experiences.
**Goal P-SE 5.** Child uses basic problem-solving skills to resolve conflicts with other children. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Begins to recognize and describe social problems. Suggests solutions to conflicts with adult guidance and support.</td>
<td>Often recognizes and describes social problems, suggests solutions to conflicts, and compromises when working or playing in a group. Although simple conflicts may be resolved without adult assistance, may seek out or need adult support in more challenging moments.</td>
</tr>
<tr>
<td><strong>Emerging Skills</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Indicators

By 60 Months:
- Recognizes and describes basic social problems in books or pictures, such as both children wanting the same toy, and during interactions with other children, such as "Why do you think your friend might be sad?"
- Uses basic strategies for dealing with common conflicts, such as sharing, taking turns, and compromising.
- Expresses feelings, needs, and opinions in conflict situations.
- Seeks adult help when needed to resolve conflicts.
Sub-Domain: Emotional Functioning

**Goal IT-SE 6.** Child learns to express a range of emotions. (0-36 months)

**Goal P-SE 6.** Child expresses a broad range of emotions and recognizes these emotions in self and others. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Expresses feelings of comfort, discomfort, enjoyment, fear, surprise, anger, or unhappiness by crying, smiling, laughing, or through facial expressions, body movements, or gestures, often to elicit a response from a familiar adult.</td>
<td>Expresses a variety of emotions and modifies their expression according to the reactions of familiar adults, based on the child's cultural background.</td>
<td>Expresses a range of emotions, including surprise, guilt, embarrassment, or pride, based on increasing awareness of their effects on others.</td>
<td>Expresses a broad range of emotions across contexts, such as during play and in interactions with adults. Notices when strong emotions are exhibited by others and begins to use words to describe some of these emotions, such as happy, sad, or mad.</td>
<td>Expresses a broad range of emotions and begins to notice more subtle or complex emotions in self and others, such as embarrassed or worried. Uses words to describe own feelings when prompted, and may at times use these words without prompting, such as saying &quot;Don't be mad&quot; when engaged in play with other children.</td>
</tr>
</tbody>
</table>

### Indicators

#### By 36 Months:
- Expresses a variety of emotions through facial expressions, sounds, gestures, or words.
- Uses words to describe some feelings or emotions that reflect an awareness of other people's emotions.

#### By 60 Months:
- Recognizes and labels basic emotions in books or photographs.
- Uses words to describe own feelings.
- Uses words to describe the feelings of adults or other children.
Goal IT-SE 7. Child recognizes and interprets emotions of others with the support of familiar adults. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Atends with interest when others show they are happy, sad, or fearful by their facial expressions, voices, or actions.</td>
<td>Responds to others’ emotional expressions, often by sharing an emotional reaction, such as smiling when an adult smiles, or showing excitement when other children are excited.</td>
<td>Shows understanding of some emotional expressions of others by labeling the emotions, asking questions about them, or responding in appropriate non-verbal ways.</td>
<td>Continued Growth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Indicators
By 36 Months:
- Recognizes feelings and emotions of others.
- Responds to feelings and emotions of others with support from familiar adults.
- Describes feelings of characters in a book with support from an adult.
Goal IT-SE 8. Child expresses care and concern toward others. (0-36 months)
Goal P-SE 7. Child expresses care and concern toward others. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>May cry when another child cries.</td>
<td>Looks sad or concerned when another child is crying or upset. May seek adult's help or offer something, such as a blanket, food, or a soft toy.</td>
<td>Expresses empathy toward other children or adults who have been hurt or are crying by showing concerned attention. May try to comfort them with words or actions.</td>
<td>Often pays attention when others are distressed, but attention and response to this distress may be brief. May seek out adult support to help another child who is distressed.</td>
<td>Consistently pays attention when others are distressed and often responds with care, either by seeking out adult support or providing reassurance or support themselves.</td>
<td></td>
</tr>
</tbody>
</table>

Indicators

By 36 Months:
- Shows care and concern for others, including comforting others in distress.
- Responds to needs of others and tries to help others with simple tasks.

By 60 Months:
- Makes empathetic statements to adults or other children.
- Offers support to adults or other children who are distressed.
**Goal IT-SE 9.** Child manages emotions with the support of familiar adults. (0-36 months)
**Goal P-SE 8.** Child manages emotions with increasing independence. (36-60 months)

<table>
<thead>
<tr>
<th>Developmental Progressions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Birth–9 Months</strong></td>
</tr>
<tr>
<td>Quiets or stops crying when held and gently rocked or talked to by a familiar adult.</td>
</tr>
</tbody>
</table>

**Indicators**

- By 36 Months:
  - Uses different ways to calm or comfort self when upset.
  - Responds positively to emotional support from adults and other children.

- By 60 Months:
  - Expresses feelings in ways that are appropriate to the situation.
  - Looks for adult assistance when feelings are most intense.
  - Uses a range of coping strategies to manage emotions with the support of an adult, such as using words or taking a deep breath.
**Sub-Domain: Sense of Identity and Belonging**

**Goal IT-SE 10.** Child shows awareness about self and how to connect with others. (0-36 months)

**Goal P-SE 9.** Child recognizes self as a unique individual having own abilities, characteristics, emotions, and interests. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Learns about self by exploring hands, feet, body, and movement.</td>
<td>Experiments with use of hands and body, discovering new capacities, and how movement and gestures can be used to relate to others.</td>
<td>Shows awareness of own thoughts, feelings, and preferences as well as those of others. Uses different words or signs to refer to self and others.</td>
<td>Describes own physical characteristics and behaviors and indicates likes and dislikes when asked.</td>
<td>Describes a larger range of individual characteristics and interests and communicates how these are similar or different from those of other people.</td>
</tr>
</tbody>
</table>

### Indicators

**By 36 Months:**
- Shows awareness of self, including own body, abilities, thoughts, and feelings.
- Shows awareness of others as having thoughts and feelings separate from own.

**By 60 Months:**
- Describes self by using several different characteristics.
- Demonstrates knowledge of uniqueness of self, such as talents, interests, preferences, or culture.
Goal IT-SE 11. Child understands some characteristics of self and others. (0-36 months)

Goal P-SE 10. Child expresses confidence in own skills and positive feelings about self. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Listens and responds by quieting, smiling, or cooing when name is said to child or when it is used in conversation with a familiar adult.</td>
<td>Responds by looking or coming when called by name. Pays attention when others notice what the child is able to do.</td>
<td>Identifies obvious physical similarities and differences between self and others. Compares characteristics of self and others.</td>
<td>Expresses enjoyment in accomplishing daily routines and new skills and may draw adult attention to these accomplishments. May share own ideas or express positive feelings about self, particularly when prompted by an adult.</td>
<td>Enjoys accomplishing a greater number of tasks and sharing these accomplishments with other children and adults. Makes increasing number of contributions to group discussion and may share ideas with or without adult prompting.</td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Recognizes own name.
- Identifies some physical characteristics of self.
- Recognizes some similarities and differences between self and others.

By 60 Months:
- Shows satisfaction or seeks acknowledgment when completing a task or solving a problem.
- Expresses own ideas or beliefs in group contexts or in interactions with others.
- Uses positive words to describe self, such as kind or hard-worker.
### Goal IT-SE 12. Child shows confidence in own abilities through relationships with others. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participates in back-and-forth social interactions through facial expressions, sounds, gestures, and responding to the actions of others.</td>
<td>Expresses desires and preferences. Seeks to draw adult's attention to objects of interest or new physical skills and attends to adult's responses.</td>
<td>Contributes own ideas, skills, and abilities to activities and experiences with adults and other children. May call attention to new skills and abilities or seek to do things by self, such as putting on own jacket or pouring juice out of a small pitcher.</td>
<td></td>
<td>Continued Growth</td>
</tr>
</tbody>
</table>

### Indicators
By 36 Months:
- Show confidence in increasing abilities.
- Show others what they can do.
**Goal IT-SE 13.** Child develops a sense of belonging through relationships with others. (0-36 months)

**Goal P-SE 11.** Child has sense of belonging to family, community, and other groups. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shows awareness of familiar routines by behaviors, such as opening mouth for feeding or lifting arms to be picked up.</td>
<td>Anticipates familiar routines or activities, such as getting shoes when it is time to go outside or watching for a parent when it is time to go home.</td>
<td>Refers to personal or family experiences and events that have happened in the recent past, such as when a grandparent came to visit or when there was a family celebration.</td>
<td>Communicates feeling a sense of belonging to family and an emerging sense of connections to other communities through words or other forms of expression, such as drawing a picture of their family or sharing a special object related to their cultural heritage.</td>
<td>Has a sense of belonging to family and community and communicates details about these connections, such as sharing a story about a family gathering, both spontaneously and when prompted by an adult or other child.</td>
</tr>
</tbody>
</table>

### Indicators

**By 36 Months:**
- Identifies self as a member of a family.
- Points to or names self and other familiar people, such as in photos or pictures.
- Talks about family members, familiar people, or friends who may not be present.

**By 60 Months:**
- Identifies self as being a part of different groups, such as family, community, culture, faith, or preschool.
- Relates personal stories about being a part of different groups.
- Identifies similarities and differences about self across familiar environments and settings.
Domain III: Language, Communication, and Literacy

Sub-Domains

Language

- Attending and Understanding
- Communicating and Speaking
- Vocabulary
- Emergent Literacy

Literacy

- Phonological Awareness
- Print and Alphabet Knowledge
- Comprehension and Text Structure
- Writing

Communication is fundamental to the human experience, and language and literacy are essential to children's learning.

Language, communication, and literacy skills can develop in any language, and for the most part, they develop first in the child's home language. Language development refers to emerging abilities in listening and understanding (receptive language) and in using language (expressive language). Babies attend to the sounds of language in their environment before they are born. In the context of nurturing, responsive adult relationships, infants rapidly learn to communicate with facial expressions, gestures, and looks. They move from babbling to understanding many words spoken to them and then uttering or signing their first words. Toddlers learn to speak new words at an amazing pace and use language to express their needs, ask questions, and engage in short conversations.

Language skills continue to expand, and by the end of the preschool period, children speak in adult-like sentences, tell and re-tell stories, use verbal humor, and engage in group discussions. Preschoolers are sophisticated language users who harness language in order to take in new and complex information and organize their world. As they explore new learning experiences, they add mathematical or scientific terms to their vocabulary, such as semi-circle or T-Rex. They begin to understand word categories, such as hammers and screwdrivers are tools, and relationships among words, such as the opposite of up is down. Preschoolers with strong language skills are prepared to be successful learners in school.
Supporting development of the home language helps prepare young children for learning English. Children who are dual language learners (DLLs) show different patterns of English acquisition, depending on their prior exposure, their abilities, their temperaments, and the support they receive at home and in the early childhood program. Some children who are DLLs may use different vocabulary and sentence structure in each language.

Children's language ability affects learning and development in all areas, especially emerging literacy. Emerging literacy refers to the knowledge and skills that lay the foundation for reading and writing. As infants and toddlers listen to and repeat songs and rhymes, explore books, and hear stories, they are gaining literacy skills. By 3 years of age, children can understand the pictures in familiar books and ask what is happening. They make scribbles, shapes, and even letter-like marks on paper that may represent something to them.

For preschoolers, Language and Communication, and Literacy are distinct sub-domains to reflect the differentiation, centrality, breadth, and depth of language and literacy development in this age period. Preschoolers are beginning to grasp how written language is structured into sounds and symbols. They play rhyming games and learn the names of letters and associated sounds. They take pride in recognizing their name in print and practice writing it. Preschoolers begin to understand print conventions and the different functions of print in picture books or grocery lists. As they listen to and talk about story books or retell and enact events, they gain an understanding of sequence, character development, and causal relationships. When preschoolers are engaged literacy learners, they are laying the foundation for becoming capable readers and writers in school.

Children with disabilities may need extra support when they are learning to communicate. They may need listening devices to help them hear or assistive tools to help them speak or write clearly. Depending on the child's needs, programs can support the development of sign language as a means of communication. Programs must promote language and literacy outcomes through appropriate and intentional support so that all children can develop strong skills in language and literacy.
## Case Studies

<table>
<thead>
<tr>
<th>Young Infant (Birth to 9 months)</th>
<th>Older Infant (8 to 18 months)</th>
<th>Toddler (16 to 36 months)</th>
<th>Preschool (36 to 48 months)</th>
<th>Preschool (48 to 60 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joey, age 3 months, has started making gurgling sounds after he has been fed or when he wakes up from his nap. He likes to listen to and play with sounds and sometimes blows bubbles. Joey’s father imitates Joey’s sounds and joins in the bubble-making fun. Sometimes Joey imitates the new sounds that his father makes.</td>
<td>Bailey’s parents are learning sign language because they have noticed that Bailey, now 13 months old, imitates gestures, such as waving bye-bye. They use simple signs such as “more” and “milk” when they talk with Bailey at the table. Recently Bailey put her hands together and repeated the action and then pointed at the juice. Her father said, “Oh, you want more juice” and offered her a drink from the juice cup.</td>
<td>Ubah, age 26 months, and her mother love to look at books together. Usually they just talk about the pictures. Sometimes Ubah’s mother tells the story in her own language even if the book is written in English. They like to visit the library to get books that her older brothers and sisters can read to Ubah. Ubah points to the pictures and repeats the names of what she sees. Sometimes Ubah’s sisters and brothers draw a picture or act out what they see in the story with Ubah.</td>
<td>The 3-year-olds in Ms. Barnes’ family child care are very interested in forest animals. She shows them some short YouTube videos of animals in the wild and reads stories that take place in the forest. Today, she leads an activity with them. After assigning an animal to each child, she says, “Think of how your animal moves. Then tell us about it.” After each child has a turn sharing, she turns on some music and the room is filled with wild creatures.</td>
<td>Charles, 4½, has been diagnosed with autism spectrum disorder. To help him express himself, his teacher, Ms. Vale, made a communication board with input from his speech therapist and parents. She used a cookie sheet, magnetic tape, and pictures of activities, centers, and materials found in the classroom. While helping Charles choose an activity at choice time, Ms. Vale points to the picture of the music and movement center and asks, “Do you want to play here?” Charles nods and goes to look for the maracas.</td>
</tr>
</tbody>
</table>
Sub-Domain: Language – Attending and Understanding

**Goal IT-LC 1.** Child attends to, understands, and responds to communication and language from others. (0-36 months)

**Goal P-LC 1.** Child attends to communication and language from others. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attends to verbal and non-verbal communication by turning toward or looking at a person. Participates in reciprocal interactions by exchanging facial expressions and language sounds with familiar adults.</td>
<td>Shows understanding of the meaning of familiar caregivers’ verbal and non-verbal communication and responds with facial expressions, gestures, words, or actions, such as looking at people or objects being referred to in the environment.</td>
<td>Shows recognition of words, phrases, and simple sentences. Participates in conversations in ways that show understanding by following comments or suggestions with actions or behavior.</td>
<td>Shows acknowledgment of comments or questions and is able to attend to conversations, either spoken or signed.</td>
<td>Shows acknowledgment of complex comments or questions. Is able to attend to longer, multi-turn conversations, either spoken or signed.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>By 36 Months:</td>
<td></td>
</tr>
<tr>
<td>• Shows understanding of some words and phrases used in conversation, such as by responding to simple questions.</td>
<td></td>
</tr>
<tr>
<td>• Shows comprehension of simple sentences, such as by listening to and following one-or two-step directions.</td>
<td></td>
</tr>
<tr>
<td>By 60 Months:</td>
<td></td>
</tr>
<tr>
<td>• Uses verbal and non-verbal signals appropriately to acknowledge the comments or questions of others.</td>
<td></td>
</tr>
<tr>
<td>• Shows ongoing connection to a conversation, group discussion, or presentation.</td>
<td></td>
</tr>
</tbody>
</table>
**Goal IT-LC 2.** Child learns from communication and language experiences with others. (0-36 months)

**Goal P-LC 2.** Child understands and responds to increasingly complex communication and language from others. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pays attention when familiar adults talk or sign about objects, people, or events during face-to-face interactions by changing focus, making eye contact, or looking at people or objects.</td>
<td>Participates in joint attention with an adult by looking back and forth between the adult and object. Points or gestures when an adult is pointing, naming, or signing about a familiar or new object and learns names and uses of objects.</td>
<td>Participates in increasingly complex and lengthy periods of joint attention with adults. Shows interest, understanding, or enjoyment when participating in language activities, such as demonstrating understanding of objects' functions and uses, or when joining in games, songs, rhymes, or stories.</td>
<td>Understands and responds (verbally and non-verbally) to increasingly longer sentences, simple questions, and simple stories.</td>
<td>Shows an understanding of complex statements, questions, and stories containing multiple phrases and ideas, and responds appropriately.</td>
</tr>
</tbody>
</table>

### Indicators

**By 36 Months:**
- Acts on descriptions provided by others about people, objects, or events.
- Demonstrates interest and understanding when participating in language activities or games.

**By 60 Months:**
- Shows an ability to recall (in order) multiple step directions.
- Demonstrates understanding of a variety of question types, such as "Yes/No?" or "Who/What/When/Where?" or "How/ Why?"
- Shows an understanding of talk related to the past or future.
- Shows understanding, such as nodding or gestures, in response to the content of books read aloud, stories that are told, or lengthy explanations given on a topic.
- Children who are DLLs may demonstrate more complex communication and language in their home language than in English.
**Sub-Domain: Language – Communicating and Speaking**

**Goal IT-LC 3.** Child communicates needs and wants non-verbally and by using language. (0-36 months)

**Goal P-LC 3.** Child varies the amount of information provided to meet the demands of the situation. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Learns how to use different means of communication to signal distress or discomfort, solicit help, and to communicate interests and needs to others.</td>
<td>Uses a variety of ways to communicate interests, needs and wants, such as saying or making a sign for &quot;More&quot; when eating.</td>
<td>Combines words or signs from one or more languages into phrases and sentences to communicate needs, wants, or ideas, such as &quot;More milk,&quot; &quot;I want juice,&quot; &quot;Mas leche,&quot; or &quot;Quiero juice.&quot; Children who are dual language learners may combine their languages or switch between them.</td>
<td>Uses language, spoken or sign, for different purposes and is sometimes able to provide sufficient detail to get needs met from a variety of adults.</td>
<td>Uses language, spoken or sign, for a variety of purposes and can typically provide sufficient detail in order to get needs met from a variety of adults.</td>
</tr>
</tbody>
</table>

### Indicators

**By 36 Months:**
- Uses combinations of words and simple sentences or signs in a variety of situations.
- Uses simple sentences, such as three- and four-word sentences, to communicate needs and wants.

**By 60 Months:**
- Usually provides sufficient detail in order to get needs met, such as explaining a point of difficulty in a task or sharing a request from home with the teacher.
- Uses language, spoken or sign, to clarify a word or statement when misunderstood.
- Children who are DLLs may switch between their languages.
Goal IT-LC 4. Child uses non-verbal communication and language to engage others in interaction. (0-36 months)
Goal P-LC 4. Child understands, follows, and uses appropriate social and conversational rules. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses facial expressions, including smiling, or uses gestures or sounds, such as cooing or babbling, to engage familiar adults in social interaction.</td>
<td>Repeats actions or single words to initiate or maintain social interactions with other children or adults, such as clapping hands or calling a name to get someone’s attention.</td>
<td>Uses words, signs, phrases, or simple sentences to initiate, continue, or extend conversations with others about feelings, experiences, or thoughts.</td>
<td>Engages in conversations with adults, other children, or within the group setting lasting two or three conversational turns, and, with support, will sometimes use appropriate tone and volume for different situations.</td>
<td>Maintains multi-turn conversations with adults or other children by being responsive to the conversational partner in a variety of ways, such as by asking a question. With increasing independence, varies tone and volume of expression to match the social situation.</td>
</tr>
</tbody>
</table>

### Indicators

**By 36 Months:**
- Initiates and responds in conversations with others.
- Participates in simple conversations with others that are maintained by back-and-forth exchanges of ideas or information.
- Engages in simple conversations by expressing own feelings, thoughts, and ideas to others.

**By 60 Months:**
- Maintains multi-turn conversations with adults, other children, and within larger groups by responding in increasingly sophisticated ways, such as asking related questions or expressing agreement.
- With increasing independence, matches the tone and volume of expression to the content and social situation, such as by using a whisper to tell a secret.
**Goal IT-LC 5.** Child uses increasingly complex language in conversation with others. (0-36 months)

**Goal P-LC 5.** Child expresses self in increasingly long, detailed, and sophisticated ways. (36-60 months)

---

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Explores sounds common in many languages, such as &quot;ma-ma&quot; or &quot;ba-ba.&quot;</td>
<td>Initiates and participates in conversations by babbling and using gestures, such as showing or giving, or by using words or signs. Communicates mainly about objects, actions, and events happening in the here and now.</td>
<td>Participates in conversations with others using spoken or sign language that includes simple sentences, questions, and responses. Sometimes describes experiences that have happened in the past or are about to happen.</td>
<td>Communicates clearly enough to be understood by familiar adults but may make some pronunciation and grammatical errors. Typically uses three- to five-word phrases/sentences when communicating. With some prompting, can offer multiple (two or three) pieces of information on a single topic.</td>
<td>Communicates clearly enough to be understood by familiar and unfamiliar adults but may make some pronunciation errors and some isolated grammatical errors. Uses longer sentences, as well as sentences that are slightly more complex, such as &quot;I need a pencil because this one broke.&quot; Can offer multiple pieces of information on a topic with increasing independence and answer simple questions.</td>
</tr>
</tbody>
</table>

### Indicators

**By 36 Months:**
- Uses sentences of three or more words in conversation with others.
- Asks and answers simple questions in conversations with others.
- Refers to past or future events in conversation with others.

**By 60 Months:**
- Communicates clearly enough to be understood by adults across a range of situations. Pronunciation errors and grammatical errors are isolated and infrequent. Shows proficiency with prepositions, regular/irregular past tense, possessives, and noun-verb agreement.
- Typically, uses complete sentences of more than five words with complex structures, such as sentences involving sequence and causal relations.
- Can produce and organize multiple sentences on a topic, such as giving directions or telling a story, including information about the past or present or things not physically present, and answer a variety of question types.
Goal IT-LC 6. Child initiates non-verbal communication and language to learn and gain information. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Takes turns in non-verbal conversations by using facial expressions, sounds, gestures, or signs to initiate or respond to communication.</td>
<td>Asks simple questions using gestures, such as pointing, signs or words, with variations in pitch and intonation.</td>
<td>Seeks information and meaning of words by asking questions in words or signs, such as &quot;What's that?&quot; or &quot;Who's that?&quot; or &quot;Why?&quot;</td>
<td>Continued Growth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Asks questions in a variety of ways.
- Repeats or re-phrases questions until a response is received.
**Sub-Domain: Language – Vocabulary**

**Goal IT-LC 7.** Child understands an increasing number of words used in communication with others. (0-36 months)

**Goal P-LC 6.** Child understands and uses a wide variety of words for a variety of purposes. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Looks at familiar people, animals, or objects when they are named such as mama, puppy, or ball.</td>
<td>Looks or points at a person or object that has been named, follows simple directions, and responds appropriately to the meaning of words or signs.</td>
<td>Comprehends an increasing number of words or signs used in simple sentences during conversation and interaction with familiar adults and children.</td>
<td>Shows a rapid increase in acquisition of new vocabulary words that describe actions, emotions, things, or ideas that are meaningful within the everyday environment. Uses new vocabulary words to describe relations among things or ideas. Shows repetition of new words offered by adults.</td>
<td>Shows a steady increase in vocabulary through the acquisition of words with increasing specificity and variety. Shows repetition of new words offered by adults and may ask about the meaning of unfamiliar words.</td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Shows understanding of the meaning of common words used in daily activities.
- Attends to new words used in conversation with others.
- Understands most positional words, such as on, under, up, or down.

By 60 Months:
- Demonstrates the use of multiple (two or three) new words or signs a day during play and other activities.
- Shows recognition of and/or familiarity with key domain-specific words heard during reading or discussions.
- With multiple exposures, uses new domain-specific vocabulary during activities, such as using the word "cocoon" when learning about the life cycle of caterpillars, or "cylinder" when learning about 3-D shapes.
- With support, forms guesses about the meaning of new words from context clues.
**Goal IT-LC 8.** Child uses an increasing number of words in communication and conversation with others. (0-36 months)

**Goal P-LC 7.** Child shows understanding of word categories and relationships among words. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>May use signs or verbalizations for familiar people or objects.</td>
<td>Imitates new words or signs and uses some words or signs for naming or making simple one-word requests, such as saying or signing &quot;milk&quot; when asking for a drink.</td>
<td>Uses an increasing number of words in communication and conversation with others and adds new vocabulary words regularly. Children who are DLLs may have a combined vocabulary in their languages that is similar in number to other children's vocabulary in one language.</td>
<td>Typically uses known words in the correct context and, with support, shows an emerging understanding of how words are related to broader categories, such as sorting things by color.</td>
<td>Demonstrates an increasingly sophisticated understanding of words and word categories with support, such as listing multiple examples of a familiar category or identifying a synonym or antonym.</td>
</tr>
</tbody>
</table>

### Indicators

**By 36 Months:**
- Shows understanding of the meaning of common words used in daily activities.
- Attends to new words used in conversation with others.
- Understands most positional words, such as on, under, up, or down.

**By 60 Months:**
- Demonstrates the use of multiple (two or three) new words or signs a day during play and other activities.
- Shows recognition of and/or familiarity with key domain-specific words heard during reading or discussions.
- With multiple exposures, uses new domain-specific vocabulary during activities, such as using the word "cocoon" when learning about the life cycle of caterpillars, or "cylinder" when learning about 3-D shapes.
- With support, forms guesses about the meaning of new words from context clues.
**Sub-Domain: Language – Emergent Literacy**

**Goal IT-LC 9.** Child attends to, repeats, and uses some rhymes, phrases, or refrains from stories or songs. (0-36 months)

<table>
<thead>
<tr>
<th>Developmental Progressions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Birth–9 Months</strong></td>
</tr>
<tr>
<td>Listens and attends to culturally and linguistically familiar words or signs in rhymes or songs.</td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Repeats simple familiar rhymes or sings favorite songs.
- Retells familiar stories using props.

**Goal IT-LC 10.** Child handles books and relates them to their stories or information. (0-36 months)

<table>
<thead>
<tr>
<th>Developmental Progressions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Birth–9 Months</strong></td>
</tr>
<tr>
<td>Explores a book by touching it, patting it, or putting it in mouth.</td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Asks to have several favorite books read over and over.
- Holds book, turns pages, and pretends to read.
### Goal IT-LC 11. Child recognizes pictures and some symbols, signs, or words. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Looks at pictures of familiar people, animals, or objects while an adult points at and/or names the person, animal, or object.</td>
<td>Points at, signs, or says name of, or talks about animals, people, or objects in photos, pictures, or drawings.</td>
<td>Recognizes and uses some letters or numbers, such as letters in one’s name, and shows increasing interest in written forms of language, such as print in books or signs on buildings.</td>
<td>Children who are DLLs recognize and use written forms of each of their languages.</td>
<td>Continued Growth</td>
<td></td>
</tr>
</tbody>
</table>

### Indicators

By 36 Months:
- Points to and names some letters or characters in their names.
- Recognizes familiar signs on a building or street.
- Attributes meaning to some symbols, such as a familiar logo or design.
**Goal IT-LC 12.** Child comprehends meaning from pictures and stories. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
<td>Looks at picture books and listens to an adult talk about pictures in a book.</td>
<td>Points at pictures in a book, making sounds or saying words and interacting with an adult reading a book.</td>
<td>Talks about books, acts out events from stories, and uses some vocabulary encountered during book reading.</td>
<td>Continued Growth</td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Uses pictures as a guide to talk about a story that has been read.
- Asks or answers questions about what is happening in a book or story.
- Identifies the feelings of characters in a book or story.

**Goal IT-LC 13.** Child makes marks and uses them to represent objects or actions. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
<td>Makes marks on a paper with a large crayon or marker to explore writing materials.</td>
<td>Makes scribbles on paper to represent an object or action even though an adult might not recognize what it is.</td>
<td>Continued Growth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Draws pictures using scribbles and talks with others about what they have made.
- Draws straight lines or curved lines.
- Makes letter-like marks or scribbles on paper.
Sub-Domain: Literacy - Phonological Awareness

Goal P-LIT 1. Child demonstrates awareness that spoken language is composed of smaller segments of sound. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td>Shows rote imitation and enjoyment of rhyme and alliteration. With support, distinguishes when two words rhyme and when two words begin with the same sound.</td>
<td>Demonstrates rhyme recognition, such as identifying which words rhyme from a group of three: hat, cat, log. Recognizes phonemic changes in words, such as noticing the problem with &quot;Old McDonald had a charm.&quot; Is able to count syllables and understand sounds in spoken words.</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Provides one or more words that rhyme with a single given target, such as "What rhymes with log?"
- Produces the beginning sound in a spoken word, such as "Dog begins with /d/.
- Provides a word that fits with a group of words sharing an initial sound, with adult support, such as "Sock, Sara, and song all start with the /s/ sound. What else starts with the /s/ sound?" Uses senses and simple tools to observe, gather, and record data, such as gathering data on where children's families are from and creating a graph that shows the number of children from different countries.
**Sub-Domain: Literacy – Print and Alphabet Knowledge**

**Goal P-LIT 2.** Child demonstrates an understanding of how print is used (functions of print) and the rules that govern how print works (conventions of print). (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
<td></td>
<td></td>
<td></td>
<td>Distinguishes print from pictures and shows an understanding that print is something meaningful, such as asking an adult &quot;What does this say?&quot; or &quot;Read this.&quot;</td>
<td>Begins to demonstrate an understanding of the connection between speech and print. Shows a growing awareness that print is a system that has rules and conventions, such as holding a book correctly or following a book left to right.</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Understands that print is organized differently for different purposes, such as a note, list, or storybook.
- Understands that written words are made up of a group of individual letters.
- Begins to point to single-syllable words while reading simple, memorized texts.
- Identifies book parts and features, such as the front, back, title, and author.
Goal P-LIT 3. Child identifies letters of the alphabet and produces correct sounds associated with letters. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td>Shows an awareness of alphabet letters, such as singing the ABC song, recognizing letters from one’s name, or naming some letters that are encountered often.</td>
<td>Recognizes and names at least half of the letters in the alphabet, including letters in own name (first name and last name), as well as letters encountered often in the environment. Produces the sound of many recognized letters.</td>
</tr>
</tbody>
</table>

Indicators

By 60 Months:
- Names most upper and lower-case letters.
- Knows the sounds associated with several letters.
**Sub-Domain: Literacy – Comprehension and Text Structure**

**Goal P-LIT 4.** Child demonstrates an understanding of narrative structure through storytelling/re-telling. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td>With support, may be able to tell one or two key events from a story or may act out a story with pictures or props.</td>
<td>Retells two or three key events from a well-known story, typically in the right temporal order and using some simple sequencing terms, such as first … and then.</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Re-tells or acts out a story that was read, putting events in the appropriate sequence, and demonstrating more sophisticated understanding of how events relate, such as cause and effect relationships.
- Tells fictional or personal stories using a sequence of at least two or three connected events.
- Identifies characters and main events in books and stories.
Goal P-LIT 5. Child asks and answers questions about a book that was read aloud. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
<td></td>
<td></td>
<td></td>
<td>Can answer basic questions about likes or dislikes in a book or story. Asks and answers questions about main characters or events in a familiar story. With modeling and support, makes predictions about events that might happen next.</td>
<td>With support, provides basic answers to specific questions about details of a story, such as who, what, when, or where. With support, can answer inferential questions about stories, such as predictions or how/why something is happening in a particular moment.</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Answers questions about details of a story with increasingly specific information, such as when asked "Who was Mary?" responds "She was the girl who was riding the horse and then got hurt."
- Answers increasingly complex inferential questions that require making predictions based on multiple pieces of information from the story; inferring characters' feelings or intentions; or providing evaluations of judgments that are grounded in the text.
- Provides a summary of a story, highlighting a number of the key ideas in the story and how they relate.
Sub-Domain: Literacy – Writing

Goal P-LIT 6. Child writes for a variety of purposes using increasingly sophisticated marks. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Engages in writing activities that consist largely of drawing and scribbling. Begins to convey meaning. With modeling and support, writes some letter-like forms and letters.</td>
<td>Progressively uses drawing, scribbling, letter-like forms, and letters to intentionally convey meaning. With support, may use invented spelling consisting of salient or beginning sounds, such as L for elevator or B for bug.</td>
</tr>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Creates a variety of written products that may or may not phonetically relate to intended messages.
- Shows an interest in copying simple words posted in the classroom.
- Attempts to independently write some words using invented spelling, such as K for kite.
- Writes first name correctly or close to correctly.
- Writes (draws, illustrates) for a variety of purposes and demonstrates evidence of many aspects of print conventions, such as creating a book that moves left to right.
Domain IV: Cognition

Sub-Domains
- Exploration and Discovery
- Memory
- Reasoning and Problem Solving
- Emergent Mathematical Thinking
- Imitation and Symbolic Representation and Play

Mathematics Development
- Counting and Cardinality
- Operations and Algebraic Thinking
- Measurement
- Geometry and Spatial Sense

Scientific Reasoning
- Scientific Inquiry
- Reasoning and Problem Solving

Cognitive development includes reasoning, memory, problem-solving, and thinking skills that help young children understand and organize their world.

Cognitive development is presented as two different domains for preschoolers - Mathematics Development, and Scientific Reasoning to reflect the increasingly complex and more differentiated cognitive abilities of this age period. Mathematics development in preschoolers refers to understanding numbers and quantities, their relationships, and operations, such as what it means to add to and take away. Mathematics also includes shapes and their structure, reasoning, measurement, classification, and patterns. Preschoolers are eager to measure their height to see how much they have grown and to chime in with repeating patterns in books and songs.

Scientific Reasoning refers to the emerging ability to develop scientific knowledge about the natural and physical worlds, learn scientific skills and methods, and continue developing reasoning and problem-solving skills. For preschoolers, scientific investigation includes making observations, recording them, talking about them, and analyzing them. Their investigations reflect their natural interests in how things work, in plants and animals, their bodies, and weather. In the process of investigating, they can learn to use measurement and observational tools, such as a ruler and a magnifying glass. During the early childhood years, science provides opportunities for rich vocabulary learning and collaboration with peers and fosters a sense of curiosity and motivation to learn.
Problem-solving and reasoning become more complex as preschoolers gain new abilities to ask questions and gather information. Their inclination to be curious, explore, experiment, ask questions, and develop their own theories about the world makes science an important domain for enhancing learning and school success.

Children play an active role in their own cognitive development by exploring and testing the world around them, but they also need support from parents, teachers, and other adults. When infants and toddlers feel safe and secure, they are more willing to experiment with their world, such as discovering how a pull toy works, observing what happens when they turn on a faucet, and trying out different behaviors to see how people react. In the process, they begin to understand basic mathematical, spatial, and causal relationships. Toddlers also explore concepts through a variety of symbolic activities, such as drawing and pretend play. More and more, young children can rely on their developing memory to help them make sense of the world. All this activity in the first three years lays the foundation for the more complex cognitive skills that preschoolers develop.

Increasingly, children use math strategies to solve problems during daily activities, such as figuring out how many more cups are needed at snack time. Because math includes generalizations and abstractions, math skills help young children connect ideas, develop logical and abstract thinking, and analyze, question, and understand the world around them. Children develop math concepts and skills through active exploration and discovery in the context of stimulating learning opportunities and intentional teaching strategies.

Because cognitive development encompasses a broad range of skills, behaviors, and concepts, children display great individual variation in their development from birth to 5. Prior experiences, cultural and linguistic backgrounds, temperament, and many other factors can impact the rate and course of cognitive development. Children with disabilities may require extra support as they use their senses and bodies to explore or as they describe their scientific investigations. The instruction and learning opportunities young children experience set the stage for their cognitive development and success.
## Case Studies

<table>
<thead>
<tr>
<th>Young Infant (Birth to 9 months)</th>
<th>Older Infant (8 to 18 months)</th>
<th>Toddler (16 to 36 months)</th>
<th>Preschool (36 to 48 months)</th>
<th>Preschool (48 to 60 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luis, age 6 months, likes to reach with his hand for the toy that is hanging above him. He has learned that it makes an interesting sound when he hits it. Sometimes he tries to kick the toy with his feet or roll over to get closer to it. His mother changes the toy from time to time because she knows that Luis likes to repeat this action over and over.</td>
<td>Hai, age 14 months, spends a lot of time with his grandparents who care for him while his mother and father work. Usually they come to Hai’s home to take care of him and he seems comfortable in a familiar setting. Hai’s mother is happy when they go to visit grandmother on the weekend and Hai gets excited, smiles and says “Nana” when he sees his familiar caregiver.</td>
<td>Sam, age 26 months, and Bobby, age 30 months, are best buddies at the family child care home they go to while their parents work. They love to play with cars and trucks. They push the cars and trucks along the floor while making motor noises and saying “Beep, beep” as they crash their cars. Their caregiver has shown them how to make a road with the blocks that they can drive their cars on. Now Sam and Bobby are making houses with the blocks and even a garage for their cars.</td>
<td>A group of 3½- and 4-year-old preschoolers are getting ready to play musical hula hoops. They place five hula hoops on the floor, and four children stand in each hoop. Ms. Barco, their teacher, turns on the music and the children jump out of their hoops and run around. When the music stops, Ms. Barco removes a hoop and turns on the music again. The children now squeeze into four hoops, not five. She asks, “How many hoops did we start with? How many do we have now?” The game continues until there are two hoops left. She asks, “Will you all fit in two hoops? Let’s see.” This time, the children stand with one foot in and one foot out of the hoops, so everyone will fit. Ms. Barco has the children count as they step out of the hoops. When they get to 20 she says, “That’s everyone.”</td>
<td>“You are hungry today, Margot. You ate four crackers with cheese,” says Ms. Moore. “I’m still hungry,” says 4-year-old Margot. “I need one more. Then I will be full.” “Okay,” says Ms. Moore. “Then you will have had four crackers and cheese plus one more.” “I know,” says Margot while counting on her fingers. “One, two, three, four, and this pinky finger too, five. Five crackers with cheese!”</td>
</tr>
</tbody>
</table>
**Sub-Domain: Cognition – Exploration and Discovery**

**Goal IT-C 1.** Child actively explores people and objects to understand self, others, and objects. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses the senses and a variety of actions to examine people and objects, such as mouthing, touching, shaking, or dropping.</td>
<td>Acts intentionally to achieve a goal or when manipulating an object, such as trying to get an adult to do something or trying different ways to reach a toy under a table.</td>
<td>Observes and experiments with how things work, seeks information from others, or experiments with different behaviors to see how people and objects react.</td>
<td></td>
<td></td>
<td>Continued Growth</td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Learns about characteristics of people and properties and uses of objects through the senses and active exploration.
- Experiments with everyday objects or materials to answer "What?" "Why?" or "How?" questions.

**Goal IT-C 2.** Child uses understanding of causal relationships to act on social and physical environments. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeats an action to make things happen or to get an adult to repeat an action, such as dropping a toy from the high chair repeatedly and waiting for an adult to pick it up.</td>
<td>Engages in purposeful actions to cause things to happen, such as making splashes in a puddle or rolling a ball to knock over a tower.</td>
<td>Identifies the cause of an observed outcome, such as the tower fell over because it was built too high. Predicts outcomes of actions or events, such as turning the faucet will make water come out.</td>
<td></td>
<td></td>
<td>Continued Growth</td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Makes simple predictions about what will happen next, such as in a story or in everyday routines.
- Anticipates some cause and effects of own actions, such as what happens while running with a cup of water.
**Sub-Domain: Cognition – Memory**

**Goal IT-C 3.** Child recognizes differences between familiar and unfamiliar people, objects, actions, or events. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognizes familiar people by their faces or voices. Learns to distinguish between familiar and unfamiliar people.</td>
<td>Remembers actions of familiar adults, the usual location of familiar objects, and parts of familiar routines. Notices and responds to new people, objects, or materials in the environment.</td>
<td>Anticipates and communicates about multiple steps of familiar routines, activities, or events. Expresses surprise or asks about unexpected outcomes or unusual people, actions, or events.</td>
<td>Continued Growth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Comments about similarities or differences between new people, objects, or events, and ones that are more familiar.
- Tells others about what will happen next or about changes in usual routines or schedules.
**Goal IT-C 4.** Child recognizes the stability of people and objects in the environment. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shows awareness that people and objects still exist when they are out of sight or sound range. May turn head or crawl towards a parent or other familiar adult who leaves the room.</td>
<td>Searches for hidden or missing people or objects in the place they were last seen or found. May wait and watch at a door or window for the return of a family member.</td>
<td>Uses a variety of search strategies to find hidden or missing people or objects, including looking in multiple locations for things that have been missing for some time.</td>
<td>Continued Growth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Notices who is missing from a familiar group, such as family at dinner or children in a playgroup.
- Looks in several different places for a toy that was played with a few days before.

**Goal IT-C 5.** Child uses memories as a foundation for more complex actions and thoughts. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shows excitement with a toy or other object that was played with days earlier. Anticipates familiar actions or routines, such as getting picked up or being fed.</td>
<td>Remembers how to use objects or materials from previous experience. Anticipates routines or events by taking action, such as going to the table when it is time to eat.</td>
<td>Tells others about memories and past experiences. Remembers how to do a series of actions that were observed at an earlier time.</td>
<td>Continued Growth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Recalls a similar family event when hearing a story read.
- Prepares for next routine or activity based on past experiences, such as gets hat or coat when it is time to go outside.
- Repeats simple rules about expected behavior, such as "We wash our hands before we eat."
**Sub-Domain: Cognition – Reasoning and Problem Solving**

**Goal IT-C 6.** Child learns to use a variety of strategies in solving problems. (0-36 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Engages in simple repeated actions to reach a goal, such as trying to get whole hand and then fingers or thumb in mouth.</td>
<td>Explores how to make something happen again or how something works by doing actions over and over again, such as repeatedly filling a container and emptying it out.</td>
<td>Engages in activities for longer periods of time and tries several times to solve more challenging problems, often using a combination of actions or behaviors.</td>
<td>Continued Growth</td>
<td></td>
</tr>
</tbody>
</table>

### Indicators

By 36 Months:
- Uses a variety of strategies to solve problems, such as trial and error, simple tools, or asking someone to help.
- Tries to solve the same problem in several different ways at different times.
**Goal IT-C 7.** Child uses reasoning and plans ahead to solve problems. (0-36 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses own actions or movements to solve simple problems, such as rolling to the side to reach an object or kicking to make something move.</td>
<td>Tries different solutions to everyday problems until discovering one that works. May try the same strategy multiple times even if it is not working.</td>
<td>Uses problem-solving and experimenting to figure out solutions to everyday problems, including in social situations, such as when two children who both want to fit into a small car agree to take turns.</td>
<td>Continued Growth</td>
<td></td>
</tr>
</tbody>
</table>

### Indicators

By 36 Months:
- Tries to fix things that are broken, such as putting a toy back together or using tape to repair a torn paper.
- Plans ways to solve problems based on knowledge and experience, such as getting a stool to reach a book that is on a shelf after trying to reach it on tiptoes.
Sub-Domain: Cognition – Emergent Mathematical Thinking

**Goal IT-C 8.** Child develops sense of number and quantity. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attends to quantity in play with objects, such as reaching or looking for more than one object.</td>
<td>Uses a few basic words to refer to change in the number of objects, such as asking for &quot;more&quot; or saying &quot;all gone&quot; when a plate is empty.</td>
<td>Uses language to refer to quantity, such as using some number words or signs to identify small amounts, or using other words referring to quantity, such as a little, too much, or a lot.</td>
<td>Continued Growth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Counts small number of objects (two or three), sometimes counting the same object twice or using numbers out of order.
- Identifies "more" or "less" with a small number of items without needing to count them.
- Uses fingers to show how old they are.
Goal IT-C 9. Child uses spatial awareness to understand objects and their movement in space. (0-36 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Explores or examines objects and watches objects when they move.</td>
<td>Explores how things fit together, how they fit with other things, and how they move through space, such as a ball thrown under a table.</td>
<td>Predicts or anticipates how things move through space, or fit together or inside other things, such as putting smaller objects into a small box and larger objects into a large box.</td>
<td>Continued Growth</td>
<td></td>
</tr>
</tbody>
</table>

### Indicators

By 36 Months:
- Does puzzles with interlocking pieces, different colors, and shapes.
- Understands some effects of size or weight when picking up or moving objects.

Goal IT-C 10. Child uses matching and sorting of objects or people to understand similar and different characteristics. (0-36 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Explores or examines differences between familiar or unfamiliar people or between different types of objects, such as by mouthing or shaking a toy.</td>
<td>Matches objects by similar or related characteristics, such as matching shapes with openings in a shape-sorting box or by putting a toy bottle with a baby doll.</td>
<td>Sorts objects into two groups based on a single characteristic, such as grouping toy animals separately from toy cars, or putting red socks and white socks in different piles.</td>
<td>Continued Growth</td>
<td></td>
</tr>
</tbody>
</table>

### Indicators

By 36 Months:
- Sorts toys or other objects by color, shape, or size.
- Orders some objects by size.
- Identifies characteristics of people, such as "Mom has black hair like me."
**Sub-Domain: Cognition - Imitation and Symbolic Representation and Play**

**Goal IT-C 11.** Child observes and imitates sounds, words, gestures, actions and behaviors. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Engages in reciprocal imitation games, such as patting on a table or handling an object back and forth.</td>
<td>Imitates what other people did earlier, such as wiping up a spill or closing a door.</td>
<td>Imitates more complex actions, words, or signs at a later time in order to communicate, make, or do something.</td>
<td>Continued Growth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**
By 36 Months:
- Watches and imitates adult actions involving multiple steps, such as getting spoons and forks to set a table.
- Imitates someone else's conversation, such as in pretend play or on a toy phone.

**Goal IT-C 12.** Child uses objects or symbols to represent something else. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td>Uses toy objects in ways similar to the real objects they represent, such as talking on a toy phone.</td>
<td>Uses objects as symbols to represent other objects during pretend play, such as using blocks for toy cars or trucks.</td>
<td>Continued Growth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**
By 36 Months:
- Uses familiar objects to represent something else.
- Improvises with props during pretend play, such as using a towel for a blanket or making a cookie out of play dough.
- Understand that some symbols have meaning, such as a sign or a drawing.
**Goal IT-C 13.** Child uses pretend play to increase understanding of culture, environment, and experiences. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td></td>
<td>Imitates everyday actions of others, such as pretending to feed a doll or stuffed toy.</td>
<td>Acts out routines, stories, or social roles using toys and other materials as props, such as setting toy dishes and cups on a table or pretending to shop for groceries.</td>
<td></td>
<td>Continued Growth</td>
</tr>
<tr>
<td>Indicators</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By 36 Months:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Seeks to involve others in pretend or make-believe play.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Looks for props to use when telling or making up a story.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Uses pretend play to try out solutions to everyday problems, such as ways to respond to stressful situations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Sub-Domain: Mathematics Development – Counting and Cardinality**

**Goal P-MATH 1.** Child knows number names and the count sequence. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Says or signs some number words in sequence (up to 10), starting with one. Understands that counting words are separate words, such as “one,” “two,” “three” versus “one two three”.</td>
<td>Says or signs more number words in sequence.</td>
</tr>
</tbody>
</table>

#### Emerging Skills

**Indicators**

By 60 Months:
- Counts verbally or signs to at least 20 by ones.

---

**Goal P-MATH 2.** Child recognizes the number of objects in a small set. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Develops an understanding of what whole numbers mean. Begins to recognize the number of small objects in groups without counting (referred to as &quot;subitizing&quot;).</td>
<td>Quickly recognizes the number of objects in a small set (referred to as &quot;subitizing&quot;).</td>
</tr>
</tbody>
</table>

#### Emerging Skills

**Indicators**

By 60 Months:
- Instantly recognizes, without counting, small quantities of up to five objects and says or signs the number.
Goal P-MATH 3. Child understands the relationship between numbers and quantities. (36-60 months)

<table>
<thead>
<tr>
<th>Developmental Progressions</th>
<th>8–18 Months</th>
<th>16–36 Months</th>
<th>36–48 Months</th>
<th>48–60 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth–9 Months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Begins to coordinate verbal counting with objects by pointing to or moving objects for small groups of objects laid in a line (referred to as one-to-one correspondence). Begins to understand that the last number represents how many objects are in a group (referred to as &quot;cardinality&quot;).</td>
<td>Understands that number words refer to quantity. May point to or move objects while counting objects to 10 and beyond (one-to-one correspondence). Understands that the last number represents how many objects are in a group (cardinality).</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- When counting objects, says or signs the number names in order, pairing one number word that corresponds with one object, up to at least 10.
- Counts and answers "How many?" questions for approximately 10 objects.
- Accurately counts as many as five objects in a scattered configuration.
- Understands that each successive number name refers to a quantity that is one larger.
- Understands that the last number said represents the number of objects in a set.
Goal P-MATH 4. Child compares numbers. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td>Begins to accurately count and compare objects that are about the same size and are in small groups with adult assistance, such as counts a pile of two blocks and a pile of four and determines whether the piles have the same or different numbers of blocks. Identifies the first and second objects in a sequence.</td>
<td>Counts to determine and compare number amounts even when the larger group’s objects are smaller in size, such as buttons, compared with the smaller group's objects that are larger in size, such as markers. Uses numbers related to order or position.</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Identifies whether the number of objects in one group is more than, less than, or the same as objects in another group for up to at least five objects.
- Identifies and uses numbers related to order or position from first to tenth.
**Goal P-MATH 5.** Child associates a quantity with written numerals up to 5 and begins to write numbers. (36-60 months)

<table>
<thead>
<tr>
<th>Developmental Progressions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Birth–9 Months</strong></td>
</tr>
<tr>
<td>Emerging Skills</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Associates a number of objects with a written numeral 0–5.
- Recognizes and, with support, writes some numerals up to 10.
**Sub-Domain: Mathematics Development – Operations and Algebraic Thinking**

**Goal P-MATH 6.** Child understands addition as adding to and understands subtraction as taking away from. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
<td></td>
<td></td>
<td>Begins to add and subtract very small collections of objects with adult support. For example, the teacher says, &quot;You have three grapes and get one more. How many in all?&quot; Child counts out three, then counts out one more, then counts all four: &quot;One, two, three, four. I have four!&quot;</td>
<td>Solves addition problems by joining objects together and subtraction problems by separating, using manipulatives and fingers to represent objects.</td>
</tr>
</tbody>
</table>

### Indicators

By 60 Months:
- Represents addition and subtraction in different ways, such as with fingers, objects, and drawings.
- Solves addition and subtraction word problems. Adds and subtracts up to five to or from a given number.
- With adult assistance, begins to use counting on from the larger number for addition. For example, when adding a group of three and a group of two, counts "One, two, three..." and then counts on "Four, five!" (keeping track with fingers).
- When counting back for subtraction such as taking away three from five, counts, "Five, four, three...two!" (keeping track with fingers).
Goal P-MATH 7. Child understands simple patterns. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td>Recognizes a simple pattern, and with adult assistance, fills in the missing element of a pattern, such as boy, girl, boy, girl, ____, girl. Duplicates and extends ABABAB patterns.</td>
<td>Creates, identifies, extends, and duplicates simple repeating patterns in different forms, such as with objects, numbers, sounds, and movements.</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Fills in missing elements of simple patterns.
- Duplicates simple patterns in a different location than demonstrated, such as making the same alternating color pattern with blocks at a table that was demonstrated on the rug. Extends patterns, such as making an eight-block tower of the same pattern that was demonstrated with four blocks.
- Identifies the core unit of sequentially repeating patterns, such as color in a sequence of alternating red and blue blocks.
Sub-Domain: Mathematics Development – Measurement

Goal P-MATH 8. Child measures objects by their various attributes using standard and non-standard measurement. Uses differences in attributes to make comparisons. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td>With adult support, begins to understand that attributes can be compared, such as one child can be taller than another child.</td>
<td>With some adult support, uses measurable attributes to make comparisons, such as identifies objects as the same/different and more/less.</td>
</tr>
</tbody>
</table>

Indicators

By 60 Months:
- Measures using the same unit, such as putting together snap cubes to see how tall a book is.
- Compares or orders up to five objects based on their measurable attributes, such as height or weight.
- Uses comparative language, such as shortest, heavier, or biggest.
Sub-Domain: Mathematics Development – Geometry and Spatial Sense

Goal P-MATH 9. Child identifies, describes, compares, and composes shapes. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td>Recognizes and names typical circle, square, and sometimes a triangle. With adult support, matches some shapes that are different sizes and orientations.</td>
<td>Recognizes and compares a greater number of shapes of different sizes and orientations. Begins to identify sides and angles as distinct parts of shapes.</td>
</tr>
</tbody>
</table>

Indicators

By 60 Months:

- Names and describes shapes in terms of length of sides, number of sides, and number of angles.
- Correctly names basic shapes regardless of size and orientation.
- Analyzes, compares and sorts two-and three-dimensional shapes and objects in different sizes. Describes their similarities, differences, and other attributes, such as size and shape.
- Creates and builds shapes from components.
**Goal P-MATH 10.** Child explores the positions of objects in space. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td>Begins to understand spatial vocabulary. With adult support, follows directions involving their own position in space, such as &quot;Stand up and stretch your arms to the sky.&quot;</td>
<td>Increasingly understands spatial vocabulary. Follows directions involving their own position in space, such as &quot;Move to the front of the line.&quot;</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Understands and uses language related to directionality, order, and the position of objects, including up/down and in front/behind.
- Correctly follows directions involving their own position in space, such as "Stand up" and "Move forward."
**Sub-Domain: Scientific Reasoning - Scientific Inquiry**

**Goal P-SCI 1.** Child observes and describes observable phenomena (objects, materials, organisms, and events). (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
<td></td>
<td></td>
<td></td>
<td>Uses the five senses to observe objects, materials, organisms, and events. Provides simple verbal or signed descriptions. With adult support, represents observable phenomena, such as draws a picture.</td>
<td>Makes increasingly complex observations of objects, materials, organisms, and events. Provides greater detail in descriptions. Represents observable phenomena in more complex ways, such as pictures that include more detail.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Indicators</strong></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>By 60 Months:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Identifies the five senses (smell, touch, sight, sound, taste) and uses them to make observations.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Uses observational tools to extend the five senses, such as a magnifying glass, microscope, binoculars, or stethoscope.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Describes observable phenomena using adjectives and labels, such as lemons taste sour and play dough feels sticky.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Represents observable phenomena with pictures, diagrams, and 3-D models.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Goal P-SCI 2.** Child engages in scientific talk. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td>Begins to use scientific vocabulary words with modeling and support from an adult. Sometimes repeats new words offered by adults.</td>
<td>Uses a greater number of scientific vocabulary words. Repeats new words offered by adults and may ask questions about unfamiliar words.</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Uses scientific practice words or signs, such as observe, describe, compare, contrast, question, predict, experiment, reflect, cooperate, or measure.
- Uses scientific content words when investigating and describing observable phenomena, such as parts of a plant, animal, or object.
**Goal P-SCI 3.** Child compares and categorizes observable phenomena. (36-60 months)

<table>
<thead>
<tr>
<th>Developmental Progressions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Categorizes by sorting observable phenomena into groups based on attributes such as appearance, weight, function, ability, texture, odor, and sound.
- Uses measurement tools, such as a ruler, balance scale, eyedropper, unit blocks, thermometer, or measuring cup, to quantify similarities and differences of observable phenomena.
Sub-Domain: Scientific Reasoning - Reasoning and Problem Solving

Goal P-SCI 4. Child asks a question, gathers information, and makes predictions. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Asks simple questions. Uses adults as primary resources to gather information about questions. With adult support and modeling, makes simple predictions, such as &quot;I think that the golf ball will be heavier than the ping pong ball.&quot;</td>
<td>Asks more complex questions. Uses other sources besides familiar adults to gather information, such as books or other experts (community workers). Uses background knowledge and experiences to make predictions.</td>
</tr>
</tbody>
</table>

Emerging Skills

Indicators

By 60 Months:
- Asks questions that can be answered through an investigation, such as "What do plants need to grow?" or "What countries do the children in our class come from?"
- Gathers information about a question by looking at books or discussing prior knowledge and observations.
- Makes predictions and brainstorms solutions based on background knowledge and experiences, such as "I think that plants need water to grow," or "I think adding yellow paint to purple will make brown."
**Goal P-SCI 5.** Child plans and conducts investigations and experiments. (36-60 months)

<table>
<thead>
<tr>
<th>Developmental Progressions</th>
<th>8–18 Months</th>
<th>16–36 Months</th>
<th>36–48 Months</th>
<th>48–60 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Birth–9 Months</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>8–18 Months</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td>With adult support, engages in simple investigations and experiments, such as building a &quot;bridge&quot; out of classroom materials and seeing how many dolls it will hold before it collapses. Records data with teacher assistance, mostly using pictures and marks on a page.</td>
<td>With increasing independence, engages in some parts of conducting complex investigations or experiments. Increasingly able to articulate the steps that need to be taken to conduct an investigation. Uses more complex ways to gather and record data, such as with adult support, makes a graph that shows children's favorite snacks.</td>
</tr>
<tr>
<td><strong>16–36 Months</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>36–48 Months</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>48–60 Months</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

**By 60 Months:**
- Articulates steps to be taken and lists materials needed for an investigation or experiment.
- Implements steps and uses materials to explore testable questions, such as "Do plants need water to grow?" by planting seeds and giving water to some but not to others.
- Uses senses and simple tools to observe, gather, and record data, such as gathering data on where children's families are from and creating a graph that shows the number of children from different countries.
**Goal P-SCI 6.** Child analyzes results, draws conclusions, and communicates results. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
<td></td>
<td></td>
<td></td>
<td>With adult assistance, analyzes and interprets data. Draws conclusions and provides simple descriptions of results. For example, an adult suggests counting how many dolls can be supported by a bridge before it breaks and along with the children counts, &quot;One, two, three dolls. What happened when we put on the next doll?&quot; A child says, &quot;The bridge broke!&quot;</td>
<td>With increasing independence, analyzes and interprets data and draws conclusions. With adult support, compares results to initial prediction and generates new questions or designs. For example, after putting multiple magnets together to create one magnet that is not strong enough to lift 10 paperclips, builds another and tries again. Communicates results, solutions, and conclusions in increasingly complex ways through multiple methods.</td>
</tr>
<tr>
<td><strong>Indicators</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By 60 Months:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Analyzes and interprets data and summarizes results of investigation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Draws conclusions, constructs explanations, and verbalizes cause and effect relationships.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• With adult support, compares results to initial prediction and offers evidence as to why they do or do not work. Generates new testable questions based on results.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Communicates results, solutions, and conclusions through a variety of methods, such as telling an adult that plants need water to grow or putting dots on a map that show the number of children from each country.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Domain V: Social Studies

Sub-Domains

- Concepts of Time
- Citizenship
- Identity and Culture

Social Studies is understanding family life, the impact of culture, and how to live and work together for the good of the community and themselves.

**Social Studies** refers to young children learning about and understanding life within their families and communities.

Social Studies includes learning about the world in which one lives – and understanding how one's family and community fit into a larger world. Understanding family life, the impact of culture, and how to live and work together for the good of the community and themselves are all components of this domain. Young children begin social studies within their own family and progress to understanding about how other families, large groups, or communities work and influence their lives. Through daily life experiences, children will begin to understand how they are making choices and accepting consequences; and the concept of time and what it means within their lives. Young children will begin to understand how life 'works' and how to incorporate that understanding into daily choices.

All children learn how to be active and responsible citizens in quality early care and education programs. By embracing diversity and treating each child with respect and accepting children's ideas and feelings, children with special needs can develop into leaders like their peers without special needs. Children with special needs may require more guidance and support to learn about social systems and social concepts, so consider having them work with a partner. Meaningful experiences that help children learn about people and the world we live in can have a positive impact on the rest of their lives.
Case Studies

*Embedded in the social emotional domain you will find specific case studies that encompasses social studies.
Sub-Domain: Concepts of Time

Goal P-SS 1. Child demonstrates a basic understanding of past, present, and future and how things, people, and places change over time. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td>Children may describe how they have grown over time. Demonstrate a simple sequence in time.</td>
<td>Able to look outside themselves and identify changes over time. Demonstrates a more complex sequence in time.</td>
</tr>
</tbody>
</table>

Indicators

By 60 Months:
- Uses "ed" on verbs to include past tense (e.g., walked, cooked).
- Responds appropriately to terms related to time (e.g. before, after, now, soon, later, first/last, yesterday/today/tomorrow, morning/night, in a few minutes).
- Anticipates recurring activities.
**Sub-Domain: Citizenship**

**Goal P-SS 4.** Child demonstrates and exhibits an awareness of rules and routines in the classroom, community, and family life. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Follows simple rules and routines with assistance from adults, such as hanging up their coat or sitting at the table when asked by an adult.</td>
<td>Usually follows classroom rules and routines with occasional reminders from adults, such as following an end-of-lunch routine that includes putting away their plate, washing hands, and lining up at the door to go outside.</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Demonstrates awareness of classroom rules when asked and is able to follow these rules most of the time.
- Follows most classroom routines, such as putting away backpack when entering the room or sitting on the rug after outside time.
- Responds to signals when transitioning from one activity to another.
**Goal P-SS 3.** Child shares responsibility for caring for their environment. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
<td></td>
<td></td>
<td></td>
<td>Handles classroom materials, such as putting them where they belong, with adult support.</td>
<td>Usually handles, takes care of, and manages classroom materials, such as using them in appropriate ways and not throwing them from the sensory table onto the floor.</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Appropriately handles materials during activities.
- Cleans up and puts materials away appropriately, such as places blocks back on correct shelf or places markers in the correct bin.
**Goal P-SS 5.** Child begins to understand various group decision-making processes. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
<td></td>
<td></td>
<td></td>
<td>Sometimes engages in and maintains interactions with other children without support from an adult or demonstrates skills in doing this when prompted by an adult. May spontaneously engage in prosocial behaviors with other children, such as sharing and taking turns with materials and in conversations or may engage in these with prompting from adults.</td>
<td>Sustains interactions with other children more often and for increasing periods of time. Demonstrates prosocial behaviors with other children with and without prompting from adults. Likely to show at least some preference for playing with particular children.</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Engages in and maintains positive interactions with other children.
- Uses a variety of skills for entering social situations with other children, such as suggesting something to do together, joining an existing activity, or sharing a toy.
- Takes turns in conversations and interactions with other children.
- Develops friendships with one or two preferred other children.
Sub-Domain: Identity and Culture

**Goal P-SS 6.** Child understands relationships and roles within families, homes, and classroom, and demonstrate awareness of differences among families. (36-60 months)

**Goal P-SS 7.** Demonstrate awareness of differences among families and communities to which they belong. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Communicates feeling a sense of belonging to family and an emerging sense of connections to other communities through words or other forms of expression, such as drawing a picture of their family or sharing a special object related to their cultural heritage.</td>
<td>Has a sense of belonging to family and community and communicates details about these connections, such as sharing a story about a family gathering, both spontaneously and when prompted by an adult or other child.</td>
</tr>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

- By 60 Months:
  - Identifies self as being a part of different groups, such as family, community, culture, faith, or preschool.
  - Relates personal stories about being a part of different groups.
  - Identifies similarities and differences about self across familiar environments and settings.
Domain VI: Creative Arts

Sub-Domains

- Music
- Dance & Movement
- Visual Arts
- Dramatic Play

Children are encouraged to learn in, through, and about the arts by actively engaging in the processes of creating, participating in, performing and responding to quality arts experiences.

The goals in the Creative Arts domain are meant to provide guidance in four areas of art: music, dance and movement, visual arts, and dramatic play. The indicators and progressions are a sample of developmentally appropriate possibilities of children ages 3-5. (Creative arts skill development for birth to three is embedded throughout the other domains.)

From hearing a lullaby, to dancing, to finger painting, or pretending to be your favorite adult, developmentally appropriate art experiences are critical in early childhood education to gain and demonstrate understanding in art as well as other content areas. Children are naturally musicians, dancers, artists, actors, and storytellers. Providing opportunities for learning through these experiences is an important process as they engage, explore, and learn about the world around them.

It is important to note two additional aspects of creative arts experiences:

1. The four processes important to developing understanding in any learning area are especially present through art instruction: Creating, Performing, Responding, Connecting. (The National Coalition for Core Arts Standards).

2. Understanding art appreciation, particularly demonstrating interest and respect for expressive and creative work of self and others and being able to share and discuss artwork.

These two pillars of creative arts education should be weaved throughout the children’s learning experiences in each goal area.

Creative thinking, problem solving, and innovating are skills that are necessary in today’s world. These characteristics, which lead to community readiness and academic success, are an integral part of creative arts learning. Infusing arts experiences into learning opportunities will bring about meaningful engagement for young learners.
Children participate in creative arts experiences at a variety of different levels of engagement. Early Educators can successfully include all children utilizing a variety of visual, auditory, and kinesthetic formats for presenting information; creating a variety of options for students to demonstrate knowledge and understanding; and developing a variety of motivating, challenging, and age/developmentally appropriate creative arts experiences to enhance learning. Many students with special needs may participate in the same ways as their peers without special needs and they should be encouraged to do so.
Case Studies

*Embedded in the approaches to play and learning domain you will find specific case studies that encompasses creative arts.
**Sub-Domain: Music**

**Goal P-CA 1.** Child sings and plays simple musical instruments. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Skills</td>
<td></td>
<td></td>
<td></td>
<td>Repeats sound and rhythm patterns. Sings simple songs.</td>
<td>Creates own songs and movements, includes musical instruments. Vocalizes and uses instruments in more complex music/ songs.</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Experiments with musical instruments.
- Responds to rhythmic patterns and elements of music using expressive movement.
- Improvises movement and sound responses to music.
- Explores using a singing voice.
- Demonstrates beat awareness.
**Goal P-CA 2.** Child listens to music with attention. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
<td></td>
<td></td>
<td></td>
<td>Repeats song patterns and rhythmic movements to music.</td>
<td>Participates in more complex songs and involves physical movement - finger plays, chants, etc.</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Participates in music activities, such as listening, singing, or performing.
- Describes and responds to musical elements.
- Recognizes a wide variety of sounds and sound sources.
- Expresses feeling responses to music.
- Recognizes music in daily life.
- Explores musical opposites (long/slow, fast/slow, loud/soft).
### Sub-Domain: Dance and Movement

**Goal P-CA 3.** Child coordinates movements in response to beat or rhythm. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moves one body part in response to a simple rhythm pattern. Demonstrates the difference between still and moving. Moves over, under and around objects. Follows and tracks various types of music through movement, facial expressions, and voice. Creates rhythmic patterns (e.g., rhythmic poems, simple songs, etc.).</td>
<td></td>
<td></td>
<td></td>
<td>Dances to music with varying tempos. Creates simple rhythm patterns and is able to repeat them. Moves through combinations of pathways, straight, zigzag, diagonal, curve. Expands movement vocabulary by exploring words (e.g., suspend, swing, point, burst, float, droop, carve, creep, open and close). Demonstrates understanding of concepts using vocal and physical movement and instruments: soft/loud, high/low, fast/slow.</td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Expresses what is felt and heard in various musical tempos and styles.
- Moves to different patterns of beat and rhythm in music.
- Uses creative movement to express concepts, ideas, or feelings.
- Demonstrates simple phrases of movement in time and space.
- Attentively observes a dance performance.
- Recognizes dances from around the world.
**Sub-Domain: Visual Arts**

**Goal P-CA 4.** Child creates art work that depicts objects and events and/or expresses feelings, thoughts, and ideas through a variety of two-dimensional and three-dimensional processes and share about them. (e.g., painting, printing, drawing, coloring, observation, cutting, shaping, rolling, pulling, patting, observing, imitation, patterning, repetition) (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
<td></td>
<td></td>
<td></td>
<td>Mixes two basic shapes - abstract rather than representational. Uses beginning process in their art creations. Distinguish between pictures and real objects.</td>
<td>Recognizes and describes various art forms - sculpture, painting, printing. Drawings suggest real life. Drawings becoming better defined, more detail. Uses both 2-dimensional and 3-dimensional processes to create art that represents various objects like people, places and things. Begins to share about their own creations.</td>
</tr>
</tbody>
</table>

**Indicators**

By 60 Months:
- Uses different materials and techniques to make art creations.
- Discusses one’s own artistic creations and those of others.
- Knows that works of art can represent people, places, and things.
- Identifies art in daily life.
- Understands that artists have an important role in communities.
**Sub-Domain: Dramatic Play**

**Goal P-CA 5.** Child incorporates a variety of elements (e.g., character, theme, setting, idea, plot, props, costume, and make-up) into dramatic play while using a collection of processes (e.g., role-play, imitation, observation, listening, giving objects attributes they do not have, personification, pretend, vocalize environmental sounds, dramatize). (36-60 months)

|----------------------------|----------------|-------------|--------------|--------------|--------------|

**Indicators**

By 60 Months:
- Uses dialogue, actions, and objects to tell a story or express thoughts and feelings about one’s self or a character.
- Uses creativity and imagination to manipulate materials and assume roles in dramatic play situations.
- Responds to stories and plays.
- Identifies/describes characters.
Domain VII: Perceptual, Motor, and Physical Development

Sub-Domains

- Perception
- Gross Motor
- Fine Motor
- Health, Safety, and Nutrition

Perceptual, Motor, and Physical Development is foundational to children's learning in all areas because it permits children to fully explore and function in their environment.

This area of development is represented as four elements: perception, gross motor, fine motor, and health, safety, and nutrition.

Perception refers to children's use of their senses to gather and understand information and respond to the world around them. The use of perceptual information is central to infants' and toddlers' interactions, and exploration. It helps them to understand and direct their everyday experiences, such as pressing harder on clay than on play dough to make an art project or walking carefully on a slippery surface. Preschoolers also rely on perceptual information to develop greater awareness of their bodies in space and to move effectively to perform tasks, such as kicking a ball to a friend.

Motor skills support children in fully exploring their environment and interacting with people and things and thus, support development in all domains. Gross motor skills refer to moving the whole body and using larger muscles of the body, such as those in the arms and legs. In infancy, gross motor skills include gaining control of the head, neck, and torso to achieve a standing or sitting position. They also include locomotor skills that emerge in the toddler years, such as walking, throwing, and stretching. Preschoolers gain even greater control over their body, contributing to their increasing confidence and their ability to engage in social play. For example, as children learn to coordinate their movements, they are ready to learn how to pedal a tricycle and play tag.

Fine motor skills refer to using the small muscles found in individual body parts, especially those in the hands and feet. Children use their fine motor skills to grasp, hold, and manipulate small objects, such as their drinking cups, or to use tools, including scissors and paint brushes. As they gain hand-eye coordination, preschoolers learn to direct the movements of their fingers, hands, and wrists to perform more complex tasks, including drawing fine details or stringing small beads. Children can practice and refine both their fine and gross motor skills during a variety of learning experiences and while performing self-help routines, such as eating with a fork or putting on clothes.
The fourth element of Perceptual, Motor, and Physical Development is health, safety, and nutrition. Children's physical well-being depends on a number of factors, including their knowledge and use of safe, healthy behaviors and routines. For example, toddlers are learning how to use a toothbrush with adult guidance. As preschoolers become more coordinated, they can add toothpaste to their own toothbrush. Children's ability to keep themselves safe and healthy, such as communicating to adults when they are hungry or sick, is extremely important in its own right and contributes to learning and development in all areas.

For many reasons, the rate and the path of perceptual, motor, and physical development vary in young children. Cultural and individual differences must be taken into account. In some cultures, children use brushes to write their names or utensils to eat that require a great deal of hand-eye coordination. Their fine motor development may differ from other children because of their life experiences. Children's food preferences are culturally-based, and they may reject foods that are usually considered healthy in other cultures. Children with disabilities may require more individualized instruction or accommodations. For example, children with physical disabilities may need adaptations, modifications, or assistive technology to help them move or hold implements. Children with sensory-motor integration challenges also may need accommodations. With appropriate support, all children can achieve strong outcomes in perceptual, motor, and physical development.
## Case Studies

<table>
<thead>
<tr>
<th>Young Infant (Birth to 9 months)</th>
<th>Older Infant (8 to 18 months)</th>
<th>Toddler (16 to 36 months)</th>
<th>Preschool (36 to 48 months)</th>
<th>Preschool (48 to 60 months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosa’s mother knows that it is important to always put Rosa, age 4 months, to sleep on her back. She also knows that “tummy time” is important when Rosa is awake so that she can strengthen her muscles and learn to raise her head and body with her arms to look around. Sometimes Rosa’s mother rolls up a towel to put under Rosa’s arms and chest to help support her body so that she can look around and reach for a toy while she is on her tummy.</td>
<td>Tony and Anna’s parents are watching closely to see which of their 12-month-old twins will walk first. Tony was eager to crawl and explore everywhere. Anna was more content to sit and play with her toys and started to crawl later. Now both babies are pulling themselves up to the furniture and soon they will start walking on their own. Tony and Anna’s parents know they will have to do more “child proofing” to make the house safe for their new walkers.</td>
<td>Jon was born 2 months premature, and at 24 months of age he is small for his age and shows some delays in motor development. His parents spend a lot of time doing activities with him and work with several specialists. Jon likes to do puzzles and has several puzzles with large knobs on each piece that are easy for him to pick up. He works hard at turning and pushing the pieces into place. Jon often claps along with his parents to show his delight at completing a puzzle.</td>
<td>In their family child care home, Kimi and Whit, both 3, are walking along a piece of tape on the floor. Kimi moves quickly, heel to toe, heel to toe, all the way to the end. Whit takes a bit longer and loses his balance a few times. Next to them, Jack is walking alone on a balance beam. He's a little wobbly, too, but makes it to the end without falling off. Ms. Lester, the family child care provider, has been watching the children test their skills. She says, &quot;I see you are using your arms to stay balanced. That's a good strategy.&quot;</td>
<td>&quot;We're going to play 'Balloon Tennis' today,&quot; says Ms. Wallis at the morning meeting. She demonstrates how to tape a wooden paint stirrer to a sturdy paper plate to make a racket. &quot;Can everyone make a racket?&quot; Asks Carla, 4 years old, who uses a wheelchair. &quot;Yes, you can,&quot; responds Ms. Wallis. &quot;You'll find tape and plates in the art area. If anyone wants a racket with an extra-long handle, they can tape two stirrers together. After choice time, you can take your racquets to the gym where you'll find lots of balloons to play with.&quot;</td>
</tr>
</tbody>
</table>
**Sub-Domain: Perception**

**Goal IT-PMP 1.** Child uses perceptual information to understand objects, experiences, and interactions. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses perceptual information to organize basic understanding of objects when given opportunities to observe, handle, and use objects, including recognizing differences in texture and how things feel.</td>
<td>Uses perceptual information about properties of objects in matching and associating them with each other through play and interaction with an adult, such as using a play bottle to feed a baby doll.</td>
<td>Observes others making things happen to understand the cause and effect relationship of intention and action, such as seeing an adult prepare to go outside and then going to get their own jacket.</td>
<td>Continued Growth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Combines information gained through the senses to understand objects, experiences, and interactions.
- Adjusts ways of interacting with materials based on sensory and perceptual information, such as pressing harder on clay than on play dough to make something.
- Modifies responses in social situations based on perceptual information, especially when meeting new people, such as hiding their face from an unfamiliar person.
**Goal IT-PMP 2.** Child uses perceptual information in directing own actions, experiences, and interactions. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusts balance and movement with the changing size and proportion of own body in response to opportunities in the environment.</td>
<td>Uses depth perception, scans for obstacles, and makes a plan on how to move based on that information while learning to crawl, walk, or move in another way.</td>
<td>Coordinates perceptual information and motor actions to participate in play and daily routines, such as singing songs with hand motions or practicing self-care skills.</td>
<td>Continued Growth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Adjusts walking or running to the type of surface, such as a rocky, sandy, or slippery surface.
- Handles or explores objects or materials in different ways depending on perceptual information about the objects or materials, such as fragile, messy, or sticky properties.
**Sub-Domain: Gross Motor**

**Goal IT-PMP 3.** Child demonstrates effective and efficient use of large muscles for movement and position. (0-36 months)

**Goal P-PMP 1.** Child demonstrates control, strength, and coordination of large muscles. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Explores new body positions and movements, such as rolling over, sitting, crawling, hitting, or kicking at objects to achieve goals.</td>
<td></td>
<td>Moves from crawling to cruising to walking, learning new muscle coordination for each new skill, and how to manage changing ground surfaces.</td>
<td>Gains control of a variety of postures and movements including stooping, going from sitting to standing, running, and jumping.</td>
<td>Balances, such as on one leg or a beam, for short periods with some assistance. Performs some skills, such as jumping for height and hopping, but these skills may not be consistently demonstrated. Engages in physical activity that requires strength and stamina for at least brief periods.</td>
<td>Balances, such as on one leg, for longer periods of time both when standing still and when moving from one position to another. Demonstrates more coordinated movement when engaging in skills, such as jumping for height and distance, hopping, and running. Engages in more complex movements, such as riding a tricycle, with ease. Engages in physical activities of increasing levels of intensity for sustained periods of time.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>By 36 Months:</td>
<td>By 60 Months:</td>
</tr>
<tr>
<td>• Coordinates movements and actions for a purpose.</td>
<td>• Demonstrates balance in large-muscle movement, such as walking on a log without falling or balancing on one leg.</td>
</tr>
<tr>
<td>• Walks and runs, adjusting speed or direction depending on the situation.</td>
<td>• Performs activities that combine and coordinate large muscle movements, including swinging on a swing, climbing a ladder, or dancing to music.</td>
</tr>
<tr>
<td></td>
<td>• Demonstrates strength and stamina that allow for participation in a range of physical activities, such as running around playing tag.</td>
</tr>
</tbody>
</table>
**Goal IT-PMP 4.** Child demonstrates effective and efficient use of large muscles to explore the environment. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Uses each new posture (raising head, rolling onto back, sitting) to learn new ways to explore the environment. For example, sits up to be able to reach for or hold objects.</td>
<td>Uses body position, balance, and especially movement to explore and examine materials, activities, and spaces.</td>
<td>Uses a variety of increasingly complex movements, body positions, and postures to participate in active and quiet, indoor and outdoor play.</td>
<td>Continued Growth</td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Explores environments using motor skills, such as throwing, kicking, jumping, climbing, carrying, and running.
- Experiments with different ways of moving the body, such as dancing around the room.
Goal IT-PMP 5. Child uses sensory information and body awareness to understand how their body relates to the environment. (0-36 months)

Goal P-PMP 2. Child uses perceptual information to guide motions and interactions with objects and other people. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Responds to sounds and sights in the environment by orienting head or body to understand the information in the event. For example, a young infant will turn towards an adult and re-position their body to be picked up.</td>
<td>Shows awareness as an accomplished crawler or walker of new challenges or dangers in the environment, such as steep inclines or drop-offs.</td>
<td>Shows understanding of what size openings are needed for their body to move through. Learns about body size, such as doll clothes won't fit on a child's body or a child's body won't fit on dollhouse furniture.</td>
<td>Somewhat aware of own body, space, and relationship to other objects. May have difficulty consistently coordinating motions and interactions with objects and other people.</td>
<td>Shows increasing awareness of body, space, and relationship to other objects in ways that allow for more coordinated movements, actions, and interactions with others.</td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Maintains balance and posture while seated and concentrating, such as working with clay, blocks, or markers or looking at a book.
- Adjusts position of body to fit through or into small spaces.

By 60 Months:
- Demonstrates awareness of own body and other people's space during interactions.
- Moves body in relation to objects to effectively perform tasks, such as moving body in position to kick a ball.
- When asked, can move own body in front of, to the side, or behind something or someone else, such as getting in line with other children.
- Changes directions when moving with little difficulty.
**Sub-Domain: Fine Motor**

**Goal IT-PMP 6.** Child coordinates hand and eye movements to perform actions. (0-36 months)

**Goal P-PMP 3.** Child demonstrates increasing control, strength, and coordination of small muscles. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coordinates hands and eyes when reaching for and holding stable or moving objects.</td>
<td>Uses hand-eye coordination for more complex actions, such as releasing objects into a container, or stacking cups, rings, or blocks, or picking up pieces of food one by one.</td>
<td>Uses hand-eye coordination when participating in routines, play, and activities, such as putting on a mitten, painting at an easel, putting pieces of a puzzle together, or folding paper.</td>
<td>Performs simple hand-eye tasks, such as drawing simple shapes like circles and cutting paper with scissors. May demonstrate limited precision and control in more complex tasks.</td>
<td>Performs tasks that require more complex hand-eye coordination, such as cutting out shapes and drawing letter-like forms, with moderate levels of precision and control.</td>
</tr>
</tbody>
</table>

**Indicators**

**By 36 Months:**
- Uses hand-eye coordination to manipulate objects and materials such as completing puzzles or threading beads with large holes.
- Uses hand-eye coordination in handling books, such as turning pages, pointing to a picture, or looking for favorite page.

**By 60 Months:**
- Easily coordinates hand and eye movements to carry out tasks, such as working on puzzles or stringing beads together.
- Uses a pincer grip to hold and manipulate tools for writing, drawing, and painting.
- Uses coordinated movements to complete complex tasks, such as cutting along a line, pouring, or buttoning.
**Goal IT-PMP 7.** Child uses hands for exploration, play, and daily routines. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses single actions to explore shape, size, texture, or weight of objects, such as turning an object over or around, or dropping or pushing away an object.</td>
<td>Explores properties of objects and materials by using various hand actions, such as pulling at them, picking them up to examine them, pointing to learn their names, turning knobs on objects, or turning pages in a board book.</td>
<td>Plans ways to use hands for various activities, such as stacking, building, connecting, drawing, painting, and doing self-care skills or routines.</td>
<td>Continued Growth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Uses hands efficiently for a variety of actions or activities, such as building with blocks, wiping up a spill, or feeding self.
- Coordinates use of both hands to put things together, such as connecting blocks or linking toys.

**Goal IT-PMP 8.** Child adjusts reach and grasp to use tools. (0-36 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses increasingly refined grasps, matching the grasp to the task, such as using an index finger and thumb to pick up pieces of cereal or using the whole hand to bang objects together.</td>
<td>Extends reach by using simple tools, such as a pull string, stick, or rake to pull a distant object closer.</td>
<td>Adjusts grasp to use different tools for different purposes, such as a spoon, paintbrush, or marker.</td>
<td>Continued Growth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

By 36 Months:
- Adjusts grasp with ease to new tools and materials.
- Uses pincer grasp with thumb and fingers to manipulate small objects or handle tools, such as stringing small beads.
- Uses hand tools in a variety of ways, such as a rolling pin with clay or play dough, or a toy shovel with sand.
### Sub-Domain: Health, Safety, and Nutrition

**Goal IT-PMP 9.** Child demonstrates healthy behaviors with increasing independence as part of everyday routines. (0-36 months)

**Goal P-PMP 4.** Child demonstrates personal hygiene and self-care skills. (36-60 months)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anticipates and cooperates in daily routines, such as washing hands, blowing nose, or holding a toothbrush with assistance from adults.</td>
<td>Combines objects or materials in new and unexpected ways. Shows delight in creating something new. Participates in health care routines with more independence, such as washing hands, blowing nose, brushing teeth, or drinking from a cup.</td>
<td>Shows an awareness of personal hygiene and self-care skills, such as telling an adult it is important to wash hands before eating. May not complete or exhibit these skills regularly without adult guidance and supervision.</td>
<td>Begins to take more responsibility for personal hygiene and self-care skills. Sometimes completes them without adult prompting.</td>
<td></td>
</tr>
</tbody>
</table>

**Indicators**

**By 36 Months:**
- Shows increasing independence in self-care routines with guidance from adults.
- Puts on or takes off some articles of clothing, such as shoes, socks, coat, or hat.

**By 60 Months:**
- Washes hands with soap and water. Knows to do this before eating, after using the bathroom, or after blowing nose.
- Demonstrates increasing ability to take responsibility for participating in personal self-care skills, such as brushing teeth or getting dressed.
Goal IT-PMP 10. Child uses safe behaviors with support from adults. (0-36 months)
Goal P-PMP 6. Child demonstrates knowledge of personal safety practices and routines. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
<td>Accepts adult guidance, support, and protection when encountering unsafe situations. Learns some differences between safe and unsafe play behaviors, such as not to stand on chairs or tables, or not to put small objects in mouth.</td>
<td>Shows awareness of a growing number of personal safety practices and routines. Looks to adults for support in enacting these.</td>
<td>Exhibits increasing independence in following basic personal safety practices and routines. Follows adult guidance around more complex practices.</td>
<td></td>
</tr>
</tbody>
</table>

### Indicators

**By 36 Months:**
- Cooperates with adults when in unsafe situations, such as taking an adult’s hand to cross a street or being cautious around an unfamiliar dog.
- Shows some understanding of safe and unsafe behaviors, such as not touching a hot stove.

**By 60 Months:**
- Identifies, avoids, and alerts others to danger, such as keeping a safe distance from swings.
- Identifies and follows basic safety rules with adult guidance and support, such as transportation and street safety practices.
**Goal IT-PMP 11.** Child demonstrates increasing interest in engaging in healthy eating habits and making nutritious food choices. (0-36 months)

**Goal P-PMP 5.** Child develops knowledge and skills that help promote nutritious food choices and eating habits. (36-60 months)

### Developmental Progressions

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emerging Skills</strong></td>
<td>Shows interest in new foods that are offered.</td>
<td>Shows willingness to try new nutritious foods when offered on multiple occasions. Sometimes makes nutritious choices about which foods to eat when offered several choices, with support from an adult.</td>
<td>Demonstrates a basic knowledge of the role of foods and nutrition in healthy development. Often requires adult guidance and supervision to make healthy eating choices.</td>
<td>Demonstrates an increasing understanding of the ways in which foods and nutrition help the body grow and be healthy. Makes healthy eating choices both independently and with support.</td>
</tr>
</tbody>
</table>

### Indicators

**By 36 Months:**
- Expresses preferences about foods, specifically likes or dislikes, sometimes based on whether the food is nutritious.
- Sometimes makes nutritious choices with support from an adult.
- Communicates to adults when hungry, thirsty, or has had enough to eat.

**By 60 Months:**
- Identifies a variety of healthy and unhealthy foods.
- Demonstrates basic understanding that eating a variety of foods helps the body grow and be healthy.
- Moderates food consumption based on awareness of own hunger and fullness.
Works Cited


Resources & References


