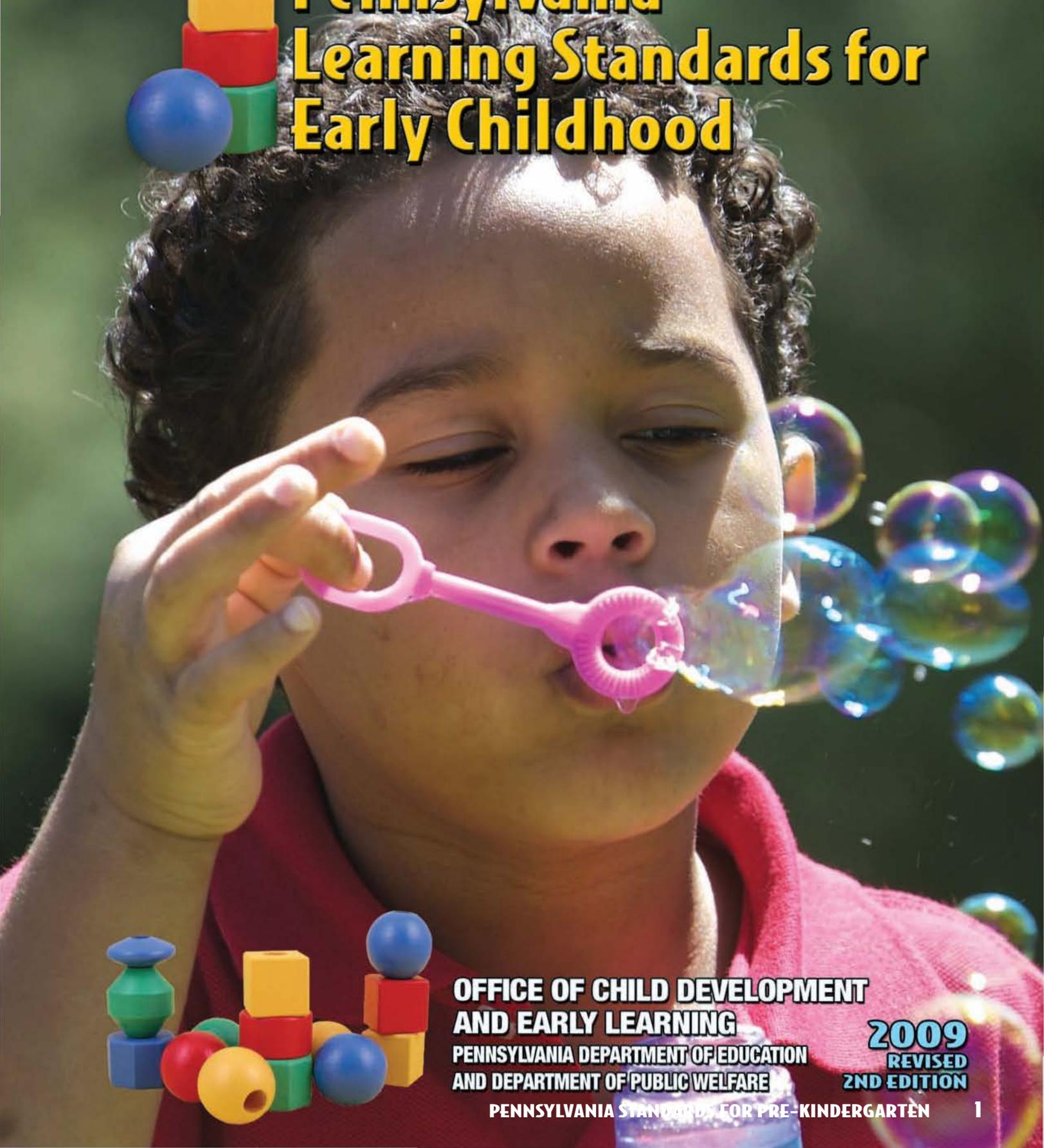


# PRE-KINDERGARTEN



## Pennsylvania Learning Standards for Early Childhood



**OFFICE OF CHILD DEVELOPMENT  
AND EARLY LEARNING**

**PENNSYLVANIA DEPARTMENT OF EDUCATION  
AND DEPARTMENT OF PUBLIC WELFARE**

**2009  
REVISED  
2ND EDITION**

**PENNSYLVANIA STANDARDS FOR PRE-KINDERGARTEN**

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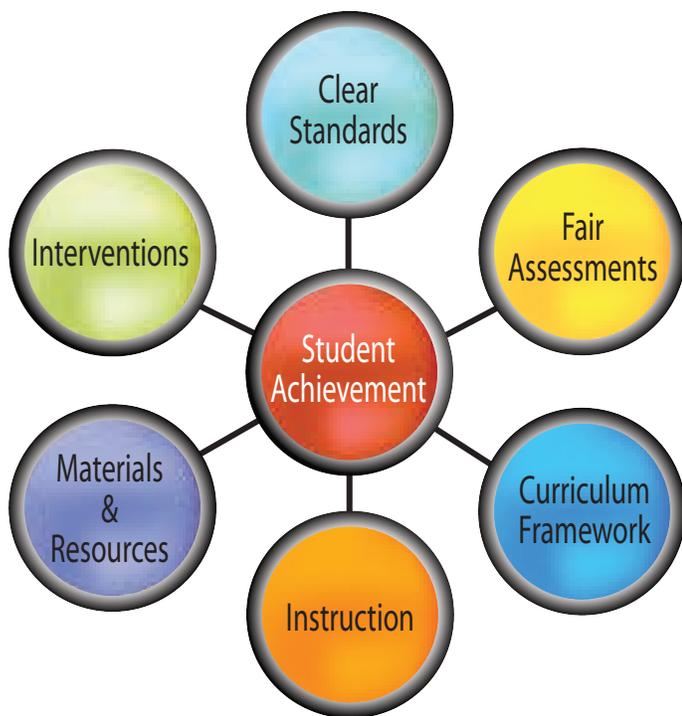
# INTRODUCTION

**C**hildren are born with an incredible capacity and desire to learn. Over 30 years of research confirms the foundational importance of early education and care for children's school and life success. It is essential, then, that students' first school experiences are robust ones, steeped in expectations that develop critical thinking and problem solving skills, a deep understanding about themselves in a social society and age appropriate content.

Teachers' instructional practices must embed the domains of development: cognitive, social-emotional, language, and physical within the foundations or approaches to learning that enable children to explore, understand and reach beyond the "here and now" to challenge themselves and to experiment and transform information into meaningful content and skills.

Teachers of very young children have the awesome task of providing rich information and experiences that build skills and understanding in the context of every day routines *and* within intentionally-designed play opportunities that capture children's interests, wonder and curiosity so they want to know more. Pennsylvania's learning standards join hand-in-hand with the learning environment; the responsive relationships that have been built with children, families and the community; the age, cultural and linguistically-appropriate curriculum; and the practices being used to assess children, classrooms and programs to create the best possible experiences for learning success.

The Department of Education and the Office of Child Development and Early Learning utilize a Standards Aligned System (SAS) that links the elements of instruction, materials and resources, curriculum framework, fair assessment and interventions, and learning standards to children's engagement in learning and their school success.



## 1. MATERIALS AND RESOURCES

Every early learning classroom, whether it is in a home atmosphere or center-based setting, must be a comfortable, safe and nurturing environment where children can play with blocks, manipulatives, art materials, and dramatic play items to enhance skill development. Children discover and understand science, social studies, and math information when they actively explore materials and ideas that are guided by teachers who intentionally design activities that

engage children in critical thinking and processing. Children also learn about their own abilities and learning styles, how to get along with others and how to appreciate others' contributions in classrooms that include a diverse set of materials and experiences.

School environments should be linked to a child's home environment, incorporating cultural and ethnic materials and children's home language and provide experiences that are inclusive for all children, regardless of ability, socio-economic status, or family background. Well-designed classrooms demonstrate a commitment to the whole child by offering materials and activities that promote social, physical, cognitive and language learning.

Classroom assessment instruments that help providers assess the arrangement of indoor and outdoor space, the provision of materials and activities, and their development of class schedules are useful in assuring best practice implementation and alignment to Pennsylvania's Learning Standards for early childhood.



## 2. INSTRUCTION

Instruction in the early years often looks different than in the older grades. Learning occurs within the context of play and active learning strategies where children are engaged in concrete and hands-on discovery and in experimentation and interaction with materials, their peers and nurturing adults.

Teachers help construct knowledge during these active learning times by designing activities that build on children's prior knowledge to create new understandings and information. A limited amount of direct teaching combined with child-initiated play produce optimal conditions for young children's education. Teachers become facilitators or guides of learning who interact with children throughout the school day. They ask open-ended questions that encourage children to think about what comes next or want to know more and they support children's creativity, problem solving, intuition and inventiveness (approaches to learning) by challenging and encouraging them. Teachers design focused instruction that is based on the identified individual needs of every child and assure these experiences encompass their interests, abilities and culture.

## 3. CURRICULUM FRAMEWORK

A curriculum framework reminds us what information should be taught to young children within each of the Key Learning Areas. It assures the continuum of learning that begins at birth and continues through graduation. Pennsylvania's curriculum framework includes big ideas, essential questions, vocabulary, concepts and competencies that further define the learning standards.

## 4. FAIR ASSESSMENTS

Teachers must use both informal and formal assessments to understand children's progress. In early childhood, formative assessments that provide information about how children are progressing in the classroom allow teachers to make adaptations or adjustments in the individualized learning plans for every child.

Early childhood professionals observe and assess children in their classroom setting using the materials that are found in their school environment. Blocks that children count or stack, for example, provide the information teachers need to understand children's math or fine motor skills. Outdoor play or recess allows the adult to observe children's gross motor skills or the social interactions with peers.

Teachers must use the information they have documented during observation, along with information from the parent, to identify goals and next steps for children's learning through play.

## 5. CLEAR STANDARDS

Learning Standards provide the framework for learning. They provide the foundational information for what children should know and be able to do. Pennsylvania's learning standards build on information learned previously, creating a continuum of learning that assures consistent and linked learning that begins in infancy, gradually getting more difficult as it extends through high school.

Pennsylvania also uses program standards that assure children's experiences are being offered in high-quality settings. Keystone STARS, PA Pre-K Counts, ABG, HSSAP all use similar sets of standards that provide guidance on program operation that exhibits best practices.

## 6. INTERVENTIONS

When teachers are observant and assess children's abilities, interests and achievement using the standards as a guide, interventions become part of the teachers' everyday practice. Revising activities, adjusting lesson plans and accommodating children's individual differences becomes matter-of-fact and the norm. Successful strategies that allow children to master skills at his or her own pace provide benefits for all children as they interact with others of varying abilities and cultures.

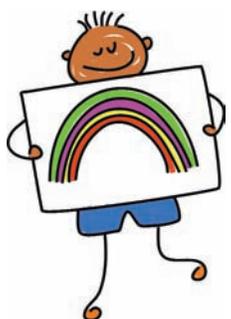
### *Early Childhood Special Education*

Early childhood classrooms should be inclusive ones where children with disabilities and developmental delays are enjoying learning experiences alongside their typically developing peers. Teachers may need to adapt or modify the classroom environment, teacher interactions and/or materials and equipment to help children with disabilities fully participate.

Pennsylvania's Learning Standards for Early Childhood are designed to be used for all children. The content within these standards does not need to be specific to an age, grade or specific functional level, but instead provide the breadth of information from which to create goals and experiences for children that will help them reach their highest potential while capturing their interests and building on what they already know. Teachers must emphasize and celebrate all children's accomplishments and focus on what all children can do.

### *English Language Learners*

Children develop language much the same way they acquire other skills. Children learn native and second languages using an individual style and rate. Differences among English Language Learners such as mixing languages or a silent period are natural. Each child's progress in learning English needs to be respected and viewed as acceptable and part of the ongoing process of learning any new skill. The skills needed for young English language learners to become proficient in English are fully embedded in the Pennsylvania's Standards for Early Childhood.



## EARLY CHILDHOOD CONNECTIONS

High quality early learning programs also promote connections that assure children's school success. Programs that build relationships with children and families and coordinate their work with other early learning programs, school districts and grades within districts create strong partnerships for success.

## 1. CONNECTIONS TO CHILDREN

Relationships are the key to successful connections between a teacher and the students. Teachers must take time to know every child, to understand the way in which they learn best, to identify the special talents and skills each child possesses and the interests that excite them to learn more. Adults who work with young children must be students themselves as they learn about children's home experiences and culture so they can design learning environments that support the home-school connection and expand prior learning and experiences into new achievements and acquisition of knowledge.

## 2. CONNECTIONS TO FAMILIES

Parents of young children have much to offer in the learning process. When a partnership is formed between teacher (or school) and the family, the connection between home and school has been strengthened, assuring that children receive consistent messages about learning and skill development. Parents should be given opportunities to learn about their children's day at school, to provide input into the information they want children to learn and master, and to understand what they can do at home to enhance the school experience. Frequent informal conversations, invitations to participate in classroom life and voluntary take-home activities that relate to school experiences help to build the partnership.

At-home resources for parents such as *Kindergarten, Here I Come*, *Kindergarten, Here I Am* or *Learning is Everywhere* provide both teachers and families with tools to connect at home and school learning and to share age appropriate expectations and activities that support that connection.

Families' ethnicity and culture must be interwoven into the life of an early childhood program and classroom. Staff must embrace all children's heritages and provide activities, materials and experiences that help children become aware of and appreciate their own culture while learning about and appreciating the similarities and differences of others'. Staff in high quality early education programs know and understand their own attitudes and biases and are culturally sensitive and supportive of diversity.

## 3. CONNECTIONS WITH OTHER EARLY LEARNING PROGRAMS

Children and families often have other needs and priorities in addition to participation in high quality early childhood learning programs. Families may need to coordinate their early learning program services with child care, health services or early intervention services, as well as with their other children's school experiences. Programs within a community that support families' single point of contact or help to coordinate services for children demonstrate a strong understanding and respect for families. Providers that reach out to neighborhood schools to facilitate transition into the public school or who have developed a working relationship with their early intervention provider assure linkages that support children's school readiness and ongoing success.

## 4. CONNECTIONS FOR LEARNING

Young children make learning connections through play. Providers that allow children time to explore and discover, both inside and outside, have optimized children's capacity to internalize and generalize content by making their own connections to prior-learned knowledge. All children, regardless of age and ability, need opportunities to engage in practice activities and experiences that are steeped in play.

Adults must also use literature connections in all domains. Literature supports both content and social and cultural learning. It is a foundation for curriculum integration.

**CONTINUED...**

## LEARNING STANDARDS TASK FORCE

Pennsylvania's Learning Standards for Early Childhood were originally constructed as a joint project of the Departments of Education and Public Welfare as part of Governor Rendell's commitment to early childhood education. The Office of Child Development and Early Learning, established in 2006 to administer both Departments' early childhood programs, has overseen revisions to the standards.

Each set of Standards has been formulated with help and guidance from practitioners who represent early childhood programs and advocacy groups, higher education, and policy analysts and researchers. Support for the development of the Standards was provided through the national Build Initiative, a multi-state partnership that helps states construct a coordinated system of programs and policies that respond to the needs of all young children.

## THE LEARNING STANDARDS CONTINUUM

Within all of Pennsylvania's Early Childhood Standards, the Key Learning Areas define the domains or areas of children's learning that assure a holistic approach to instruction. All children, regardless of age and ability, should be exposed to experiences that build their skill development in approaches to learning, social-emotional development, language and literacy development, physical or motor development, creative expression and the cognitive areas of mathematics, science and social studies. The Standards within each Key Learning Area provide the information that children should be able to know and/or do when they leave the age level or grade. The Standards are also organized by Standard Statements that specify specific skills. New, in 2009, strands further define the standards by organizing the information into focus areas. The strands become the connections to the Academic Standards for grades 3-12. They, too, use these strands to organize the content that all children in Pennsylvania should be able to know and do.

## PENNSYLVANIA'S EARLY CHILDHOOD CONTINUUM OF STANDARDS

Infant-toddler, Pre-kindergarten and Kindergarten standards are connected through the Continuum of Learning and further linked to the 3rd grade academic standards. Using the strands as the organizer, professionals are able to look across ages and grades to understand how children's development emerges. Some skills will not emerge in a noticeable way until a child is older. These standards statements will be identified on the continuum as "emerging". For example, concepts about money are not ones that infant teachers need to develop. They show in the social studies standards for infants as "emerging". Strands that are missing numerically are skills that do not need attention during the Early Childhood Education years.

Teachers who view children's skill development across ages and grades will be able to understand the sequential way children learn and become familiar with the way in which teachers at higher grade levels support learning.



## LEARNING STANDARDS FOR EARLY CHILDHOOD DO:

- Inform teachers and administrators about curriculum and assessment and guide the selection of program materials and the design of instruction
- Inform parents of age-appropriate expectations for children
- Provide a common framework for community-based work on curriculum and transitions

## THE LEARNING STANDARDS FOR EARLY CHILDHOOD ARE NOT USED:

- As a specific curriculum or to mandate specific teaching practices and materials
- To prohibit children from moving from one grade or age level to another
- To assess the competence of children or teachers

## AGE GROUPINGS IN PENNSYLVANIA'S LEARNING STANDARDS FOR EARLY CHILDHOOD

### INFANT-TODDLER LEARNING STANDARDS

The Infant-Toddler Standards are divided into three age levels: infant (birth through 12 months), young toddler (9 months – 27 months) and older toddler (24 months through 36 months). These age divisions are arbitrary as a means for organizing the content; very young children's development is uneven and may span two or all three of the age levels in different Key Areas of Learning. This is reflected by the overlap of the age 9 – 27 months in younger toddlers.

The Standards in each Key Area of Learning are displayed on an infant-toddler continuum with the content within one strand presented together on one page. Practitioners can look across each age level to determine the skills that best match their children's current development, identifying additional standard statements, examples and supportive practices to scaffold children's learning.

When strands include "Emerging" under infant or young toddler, these concepts are beginning to emerge but are expected to be mastered. For example, infants and young toddlers may be exploring mathematical estimation as they interact with materials, but intentional instruction would not be appropriate for that age. Adults should continue to introduce these concepts whenever appropriate for the individual child without expectation of mastery.

### LEARNING STANDARDS FOR PRE-KINDERGARTEN

Teachers will find the skills that pre-kindergarteners (ages three and four) are practicing and mastering within the pre-kindergarten standards. Younger preschoolers will be learning the content, while older children will be mastering the skills and showing proficiency in many of them. Classroom environments, materials and activities that are developed for this age will be appropriate for both three and four year olds; expectations for mastery will be different.

### LEARNING STANDARDS FOR KINDERGARTEN

Students who complete kindergarten should demonstrate mastery of many of the skills within the Kindergarten Standards. This document is designed for full day kindergarten classrooms. Half day kindergarten teachers will need to modify the amount of content that is introduced to children during the kindergarten year, but the cognitive processing that children must develop and the holistic instruction will remain constant regardless of the length of the kindergarten day.

It is critical that kindergarten instruction occurs through an active learning approach where teachers use differentiated instructional strategies and focus on learning centers and play as key elements of the daily schedule. Child-directed instruction should be predominant with language and literacy and math infused through the day in addition to their special focus learning times. Kindergarten children should be given opportunities to develop social and emotional skills, physical skills and their creative expression within the course of a kindergarten day.

# THE LEARNING STANDARDS FOR EARLY CHILDHOOD FORMAT

## CREATIVE THINKING AND EXPRESSION

### COMMUNICATING THROUGH THE ARTS

**Key Learning Area:** The domains of learning that assure child's holistic development.

**Standard:** Organizes the content within Key Learning Areas into smaller specific topics.

#### STANDARD 9.1a: PRODUCTION, PERFORMANCE AND EXHIBITION: MUSIC AND MOVEMENT

**BIG IDEA:** Music can be used to express and initiate aesthetic and physical responses  
**ESSENTIAL QUESTIONS:** How do I respond to music through my expressions? How do I respond to music by moving my body?

**Big Idea:** Describes the primary information that children should acquire across all age levels.

**Essential Questions:** Linked to the Big Ideas and provide the questions that support children's inquiry.

**Numbering:** Links to 3rd Grade Academic Standards. See below for further description.

**Strand:** Areas of learning within each Standard that organize the information. These strands are similar from birth through grade 12.

9.1a.1 AESTHETIC RESPONSE		
<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Respond to different forms of music and dance through participation and discussion</li> <li>Practice rhythms in different forms of music and dance</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Participate in teacher-guided music and movement activities</li> <li>Sing familiar songs, chants, and finger plays</li> <li>Dance to different types of music such as jazz, classical, ethnic</li> <li>Send a message using a drum beat</li> <li>Talk about music and movement experiences</li> <li>Initiate movement and music activities (select musical instruments during free choice time or spontaneously sing songs)</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Provide different forms of music during group activities and in centers</li> <li>Play a variety of music types for listening and for participation</li> <li>Introduce children to a variety of songs, finger plays and rhythms</li> <li>Encourage children to discuss the experience</li> <li>Create opportunities for children to express themselves through a variety of music forms through dance or body movements</li> <li>Provide large and small group activities that focus on movement and music participation</li> <li>Provide a variety of props for musical expression and movement such as scarves and hoops</li> </ul>

**Standard Statement:** The specific indicators that provide the skills for children to learn and master. In the younger years when a skill is still emerging, this area will be identified as "emerging". In some strands, there will be several standard statements; in others, there will be just one.

**Examples:** Or competencies identify ways children may demonstrate mastery or skill development.

**Supportive Practices:** Define strategies and materials professionals can use to help children learn or progress.

# GUIDING PRINCIPLES

**H**igh quality early childhood programs offer learning opportunities that have a significant impact on the success of all children. A warm, responsive relationship with a highly trained teaching staff is foundational. It is expected that teachers will intentionally integrate developmental knowledge with the attitudes, skills, and concepts children need to make progress socially and academically. High quality early childhood programs maintain high developmentally achievable expectations for all children using clear performance standards with a continuous cycle of assessment understood and used by staff, children, and parents.



High quality early childhood education and care programs have a significant impact on children's future successes.



All children can learn and deserve high expectations that are age, individually, and culturally appropriate.\*\*



Young children learn best when they are able to construct knowledge through meaningful play, active exploration of the environment and thoughtfully planned activities.



The learning environment for young children should stimulate and engage their curiosity of the world around them, and meet their physical needs and emotional needs so that children feel safe and secure.



Language and early literacy development must be supported and integrated throughout all aspects of early childhood care and education programs.



Children's learning, development and opportunities are supported when their teachers are trained in early childhood development and education, including professional training and ongoing professional development, and are intentional in their relationships and work with children and families.



Early childhood care and education programs must address the individual needs of a diverse population of children, e.g., children with special needs, children from diverse cultural backgrounds, children from all social-economic groups.



Early childhood care and education programs are defined by a set of comprehensive standards that maximize a child's growth and development across domains.



There must be a system of research based assessment that documents children's growth and development in relationship to a defined set of standards, and is used to inform instruction.



Children's learning is enhanced when families, schools, and communities work together.

\*\*Footnote: Young children with disabilities will meet standards consistent with their individualized education programs (IEPs) goals developed by IEP teams in accordance with the federal Individuals with Disabilities Education Improvement Act (IDEIA) and Pennsylvania's Early Intervention Services System Act (Act 212 of 1990).

# APPROACHES TO LEARNING THROUGH PLAY

## CONSTRUCTING, ORGANIZING AND APPLYING KNOWLEDGE



**C**hildren must demonstrate proficiency in both academics and their approach to their learning environment. These approaches are most effectively learned in the context of an integrated effort involving parents, educators and members of the community. The acquisition of these approaches is a developmental process that encompasses an individual's entire lifetime. Teachers must help students feel successful by supporting and understanding their individual differences, allowing them to explore the world in a safe and caring environment, and enhancing their curiosity and knowledge about the world in which they live.

### FAMILY RELATIONSHIPS

**T**here is no greater gift for children's successful endeavors in school than for schools to create a strong relationship between home and school. The connections that teachers and schools form with parents and guardians, especially in the early childhood years, provide the link for learning and assures that children, teachers and families work together to support children's growth and development and skill mastery. Families can be invited to participate in many ways – volunteerism, donations of time, resources and materials, shared decision-making about children's educational goals, support and referrals – but the key is a reciprocal relationship that invites parent input about a child's school performance and information about the values and home culture, while sharing details of the child's school routine and perceived successes and challenges in the classroom. Parents who perceive themselves as an integral member of the learning team are more likely to provide ongoing support and encouragement for children's learning that will carry them through high school.



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# STANDARD 15.1: CONSTRUCTING AND GATHERING KNOWLEDGE

**BIG IDEA:** Children actively construct knowledge through routines, play, practice and language. They observe others and their environment, use their senses to manipulate objects and materials and develop their own individualized approach to learning.

**ESSENTIAL QUESTIONS:** How do I find out about things? What information do I need to learn new things? What do I learn when I am playing?

15.1.1 CURIOSITY AND INITIATIVE

**STANDARD STATEMENT**

- Show interest in a growing range of topics, ideas and tasks
- Utilize all available senses to explore and learn from the environment
- Ask questions for clarification and to seek meaningful information
- Show interest and interact with others about their work or actions

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Show an interest in the outcome of stories and guess what might happen next
- Demonstrate interest in new materials that are introduced into the classroom
- Ask questions to understand something, such as, “How does that work?”
- Look at another’s painting or drawing and ask, “What’s that?”
- Watch others play and ask to join in

**SUPPORTIVE PRACTICES**

**The adult will:**

- Introduce a book by asking, “What do you think this book might be about?”
- Ask children to guess what might be inside a box or bag as a way to introduce a topic or idea
- Provide real objects that can be manipulated or explored to understand a concept, such as lining children up from short to tall to understand sequencing
- Respond to children’s questions with explanations that help them to understand
- Encourage children to research answers to questions through books, such as “Let’s find a book about dogs to see why their noses are cold.”
- Regularly rotate classroom materials and formally introduce new objects and activities into the classroom by showing excitement, “Look what I brought for us to do today!”

15.1.2 RISK TAKING

**STANDARD STATEMENT**

- Demonstrate an increased willingness to participate in both familiar and new experiences
- Differentiate between appropriate and inappropriate methods for learning information



**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Participate in a new song or circle time activity
- Try to walk across a balance beam after an adult explains the proper technique
- Try a new type of playdoh that has been introduced
- Understand that jumping from a high wall is a dangerous way to discover its height
- Explain that pulling off a doll’s arm is an inappropriate strategy for learning how it is put together

**SUPPORTIVE PRACTICES**

**The adult will:**

- Introduce new materials and activities by explaining what they are and providing instructions on their use
- Rotate materials in the classroom, pairing new and familiar things for children’s comfort
- Demonstrate enthusiasm when introducing new materials
- Allow children time to warm up to new ideas or activities without expecting them to fully participate right away
- Describe appropriate strategies for children’s participation or exploration of materials
- Engage children in “what if” scenarios to discuss potentially dangerous or inappropriate responses and situations

CONTINUED...

**STANDARD 15.1: CONSTRUCTING AND GATHERING KNOWLEDGE** continued

15.1.3 STAGES OF PLAY

**STANDARD STATEMENT**

- Engage in simple games with rules
- Use materials and objects to represent other objects
- Engage in complex play sequences that may be continued over several days

**EXEMPLARS (EXAMPLES)**

The learner will:

- Play Lotto or Candyland with teacher support
- Use a stick to represent a magic wand
- Build a road with blocks and run cars across it saying it's a speedway
- Join others in play such as acting out a doctor's office scenario using dolls as sick children over several days

**SUPPORTIVE PRACTICES**

The adult will:

- Engage children in simple game play with their peers by introducing and participating with them in games such as lotto or dominoes
- Describe objects and their pretend uses, such as "that looks just like a magic wand!"
- Rotate props and materials in the dramatic play area to encourage children to engage in play scenarios with others
- Provide opportunities for children to create objects that represent other things such as providing playdoh to make "snow balls"
- When appropriate allow structures or scenario props to stay in location for several days with-out clean-up

**STANDARD 15.2: ORGANIZING AND UNDERSTANDING INFORMATION**

**BIG IDEA:** Children learn to organize complex information and thoughts into small steps and goals. They develop plans for completing tasks by establishing goals and carrying out plans to meet those goals.

**ESSENTIAL QUESTIONS:** How do I understand the steps of a task? How do I decide how to approach a task?

15.2.1 ENGAGEMENT, ATTENTION AND PERSISTENCE

**STANDARD STATEMENT**

- Attend and follow through on adults' one or two step directions
- Initiate and extend activities
- Complete short tasks, activities, projects and experiences from beginning to end independently
- Work towards completing task despite interruptions or classroom disruptions

**EXEMPLARS (EXAMPLES)**

The learner will:

- Listen to instructions and perform two step tasks such as "Go to your cubby and get your coat"
- Begin an activity and invite peers to join or offer suggestions for the direction of an activity
- Attend by watching and listening to an adult's direction on how to approach a task and follow through, such as "Hold the paper this way and then rip at the top."
- Put together a 9-12 piece puzzle independently
- Follow an adult's suggestion for completing a task or solving a problem, such as "Hold the bottom of the cup when you pour"

**SUPPORTIVE PRACTICES**

The adult will:

- Give clear and simple directions or explanations
- Allow time for children to follow simple directions to complete a task
- Save children's work for later completion if transition to a new activity is necessary
- Show flexibility during transitions to allow children who are working on an project time to complete it
- Offer help to children who are demonstrating difficulty completing a task or activity
- Praise children's efforts to complete a project
- Minimize interruptions and disruptions for children who are concentrating on a specific task or activity

15.2.2 TASK ANALYSIS

**STANDARD STATEMENT**

- Test objects to determine their purpose
- Explain a routine sequence to another
- Break simple tasks into steps and complete them one at a time

**EXEMPLARS (EXAMPLES)**

The learner will:

- Use trial and error to find the puzzle piece that fits or the shape that fits into the shape sorter
- Identify the sequence of events in a story
- Explain to a new student what happens next during the day
- Explain what needs to happen first in order to complete a specific task or activity

**SUPPORTIVE PRACTICES**

The adult will:

- Provide multiple types of materials that can be used to explore and experiment
- Ask students to guess what a specific object may be used for
- Ask what might happen next in a story or ask children to review the sequence of a story's events
- Review steps of a task with children prior to asking them to complete the task and provide reminders throughout the process

**STANDARD 15.2: ORGANIZING AND UNDERSTANDING INFORMATION cont.**

**15.2.4 REASONING AND PROBLEM SOLVING**

**STANDARD STATEMENT**

- Try different ways to complete a task
- Attempt to accomplish a difficult task on own



**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Try new ways to accomplish a familiar task
- Use familiar materials to create something new such as using playdoh to make a road for small cars or fold paper to make a book
- Attempt to complete a task in more than one way before asking for help

**SUPPORTIVE PRACTICES**

**The adult will:**

- Encourage children to try alternative uses for materials, "I wonder if we could use this box to catch the worm."
- Encourage children to develop alternative solutions to accomplish a task "Did anyone try to do this a different way?"
- Display a variety of materials and ask learners to complete a task, allowing them to choose the material that best suits the activity
- Ask questions that require thought and creative thinking, "How can we move this heavy box onto the floor?"

**STANDARD 15.3: APPLYING KNOWLEDGE**

**BIG IDEA:** Children extend their understanding when they think creatively about new ideas in the context of past experiences and knowledge.

**ESSENTIAL QUESTIONS:** How do I relate new information to things I already know? How do I use what I already know to learn new things? How do I finish a task?

**15.3.1 CREATIVITY, FLEXIBILITY AND INVENTION**

**STANDARD STATEMENT**

- Use both observation and imitation to understand information
- Use music, art and stories to express ideas and feeling
- Use materials in unique ways to represent other things
- Try several ways to complete a task
- Produce and explain the purpose for a new creation

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Experiment with ways to put blocks together to keep them from falling
- Imitate teacher's expressions or intonations during a song, story or finger play
- Act out different roles or characters from a story
- Gallop like horses or slither like snakes to music that suggests these actions
- Use a tool to achieve a purpose similar to one already accomplished, such as using the scale to "measure" teddy bears because it was used last week to "measure" acorns
- Use a proven strategy to accomplish a new task, such as using a pencil sharper to sharpen a point onto a crayon
- Combine legos, unit blocks and wood signs to make a neighborhood with roads, houses and people
- Roll paper into a tube to act as a megaphone, explaining "I am making my voice louder."
- Try a new role in the dramatic play area that is suggested by another child
- With teacher guidance, provide ideas for re-writing familiar stories such as the Three Billy Goats Gruff into the Three Blond Hair Kids

**SUPPORTIVE PRACTICES**

**The adult will:**

- Ask children to think about alternative ways to complete a project or task if the original strategy is not successful, such as "How else could we have built that tower so it wouldn't fall?"
- Use "I wonder" when talking with children giving them time to contemplate what might happen or offer an alternative idea such as "I wonder how I could get that to fit."
- Provide opportunities for children to use materials in non-traditional ways
- Ask children to describe their creations and tell you how they work or why they were made
- Ask children for input into needed changes in the daily schedule, such as, "The photographer is coming today at the time we usually play outside. Can you think of how we might still be able to go outside today?"

## STANDARD 15.4: LEARNING THROUGH EXPERIENCE

**BIG IDEA:** Each child’s biological make-up, family, history and learning style provide the important context in which learning is constructed.

**ESSENTIAL QUESTIONS:** How do my home experiences help me learn? How do I learn how to cope with difficult situations?

**15.4.1 HOME SCHOOL IDENTITY**

**STANDARD STATEMENT**

- Demonstrate culture and home experiences during play
- Relate home or outside-learned knowledge to school experiences
- Understand that appropriate activities and events may differ from home to school

**EXEMPLARS (EXAMPLES)**

The learner will:

- Ask for additional help to master a skill or task that was begun at home such as buttoning a shirt
- Identify new skills or tasks that were learned or practiced at home such as “Mommy taught me how to tie my shoe.”
- Explain that watching TV or walking around without shoes are home activities and that different rules apply at school
- Demonstrate a forward roll that was learned during a weekend gymnastics class
- Ask parents to continue school activities when they get home, such as “Can we read this book when we get home?”

**SUPPORTIVE PRACTICES**

The adult will:

- Provide families with regular updates about the events that are occurring in school including songs, stories, and special events
- Talk with families about what children are working on at home and incorporate those goals in the school day, such as helping a child who is learning to go to sleep on his/her own at home by helping him/her lay down for nap independently at school
- Ask children to describe the extra curricular activities they participate in and show what they are learning
- Provide “take home” activity kits that can travel back and forth to school and home
- Acknowledge and value differences in class and home structure, such as, “At school we leave our shoes on during the day – I know you like to go barefoot at home”

**15.4.2 RESILIENCE**

**STANDARD STATEMENT**

- Understand how behavior may impact others’ response to action
- Understand who or where there is help when needed
- Attempt problem solving activities to achieve a positive outcome

**EXEMPLARS (EXAMPLES)**

The learner will:

- Say “uh-oh” when doing something wrong
- Tell teacher when she/he is feeling scared or apprehensive about a particular task
- Accept teacher’s or others’ ideas about new strategies to complete a project when the original attempt does not work
- Identify activities to complete that are achievable, not too hard or too easy
- Try new activities or tasks that build on previously-learned skills
- Strive to correct his/her own mistakes
- Show interest in attempting new tasks

**SUPPORTIVE PRACTICES**

The adult will:

- Provide non-threatening guidance for improvement when children have failures
- Comfort children and provide encouragement during stressful times
- Provide strategies for children to control their own behavior or stress such as stopping and taking a breath before acting when angry
- Encourage children to be autonomous by offering situations and tasks that can be completed independently
- Make referrals to health care, social service and other agencies as appropriate
- Model appropriate responses to difficult or uncomfortable situations
- Encourage step by step problem solving and completion of a task to maximize perception of successful outcomes

CONTINUED...

**STANDARD 15.4: LEARNING THROUGH EXPERIENCE** continued

15.4.3 CULTURE

**STANDARD STATEMENT**

- Show pride in belonging to a family unit
- Show understanding that family structures may differ from one family to another
- Explore unusual materials that represent other cultures
- Demonstrate awareness of some physical differences among children

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Talk about a newborn brother and sister
- Describe the adults and their roles in their home
- Ask another child if she/he has a grandma that lives with him/her
- Use multicultural crayons to depict skin coloring when making self portrait and compare it to others' colors and portraits
- Help the teacher learn useful classroom phrases from a home language
- Show interest in adaptive devices, such as a wheelchair or feeding tube and how they help children
- Offer support or help to a child with a disability

**SUPPORTIVE PRACTICES**

**The adult will:**

- Seek out information from families or community organizations to assure appropriate responses and practices that represent the cultures of children in the classroom and school
- Learn words or phrases from children's home language to use during the school day
- Label classroom materials and equipment as well as take-home materials in the home languages of the children in the classroom
- Encourage family members to volunteer or share information, materials and activities that reflect home cultures
- Use varied approaches or methods for instruction and learning to accommodate children's learning abilities and styles
- Learn about families' expectations for children's school success and incorporate those goals into classroom activities and experiences
- Incorporate ethnic foods, music, books and materials into classroom life
- Use sensitivity in celebrating traditional holidays and incorporate other cultures' holidays into the curriculum
- Provide opportunities for children to practice non-specific gender roles such as dads taking care of babies and moms acting in non-traditional female careers

**APPROACHES TO LEARNING THROUGH PLAY GLOSSARY**

**Associative Play** – A form of play in which a group of children participate in similar and identical activities without formal organization, group direction, group interaction or a definite goal; children may imitate others in a group but each child acts independently

**Attention** – An ability to focus; take all stimuli in environment and focus the mind on one thing

**Competence** – The ability to perform a task, action, or function successfully

**Cooperative Play** – Any organized recreation among a group of children in which activities are planned for the purpose of achieving some goal

**Culture** – The way of life of a particular social, ethnic or age group of people which includes beliefs, arts, customs and behaviors

**Curiosity** – A desire to learn or know about something; an inquisitiveness

**Engagement** – Ability to express oneself physically, cognitively, and emotionally during an activity; to feel a connection or a strong bond to work

**Initiative** – A readiness and ability to be eager to lead an action

**Invention** – An act of devising, creating or producing using imagination (art, music)

**Parallel Play** – A developmental stage of social development; an activity in which children play with toys like those the children around them are using,

but child is absorbed in his/her own activity; usually play beside rather than with one another

**Persistence** – The steady continuance of an action in spite of obstacles or difficulties

**Pretend Play** – Using an object to represent something else while giving it action and motion; actively experimenting with the social and emotional roles of life; can build skills in many developmental areas

**Resilience** – The ability to cope with and bounce back from all types of challenges. A person thrives, matures and increases competence by drawing on biological, psychological and environmental resources

**Solitary Play** – A form of play among a group of children within the same room or area in which each child engages in an independent activity using toys that are different from the toys of others; shows no interest in joining in or interfering with the play of others

**Task Analysis** – A process of breaking down complex behaviors into smaller, discrete, specific sub-behaviors to be performed in a certain order for maximum success

**Temperament** – The combination of mental, physical, and emotional traits of a person; natural predisposition

# CREATIVE THINKING AND EXPRESSION

## COMMUNICATING THROUGH THE ARTS



**C**reative thinking and expression is an important component of children’s early learning experiences. Children who are given opportunities to develop their imagination and creativity through a variety of media are learning to express their individuality in interests, abilities and knowledge. When they view others’ work, children are also learning to appreciate and respect differences in culture and viewpoint. Creative expression influences children’s growing competence as creative problem solvers and provides insight about the world around them. Teachers support creative learning by providing concrete, process-oriented play experiences that encourage children to use their imagination and to experiment with new ideas and materials.

### DIVERSITY AND CULTURE

**T**oday’s early childhood classrooms include an increasingly diverse group of children, families and teachers who represent many cultures, values and lifestyles. Providers have a unique opportunity to create welcoming environments that emphasize respect for diversity and support families’ cultural and linguistic differences. Teachers must help assure the preservation of the child’s home language while supporting their second language acquisition. Programs that create experiences and opportunities that honor all children’s home cultures and values by developing creative strategies for including and expanding the home to school connection and provide children with varied ways to demonstrate their learning and understanding are assuring all children’s success in school.



### Standard

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# STANDARD 9.1a: PRODUCTION AND PERFORMANCE: MUSIC AND MOVEMENT

**BIG IDEA:** Music can be used to express and initiate aesthetic and physical responses.

**ESSENTIAL QUESTION:** How can I express myself through music and movement activities?

**9.1a.1 AESTHETIC RESPONSE**

**STANDARD STATEMENT**

- Respond to different forms of music and dance through participation and discussion
- Practice rhythms in different forms of music and dance



**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Participate in teacher-guided music and movement activities
- Sing familiar songs, chants, and finger plays
- Dance to different types of music such as jazz, classical, ethnic
- Send a message using a drum beat
- Talk about music and movement experiences
- Initiate movement and music activities (select musical instruments during free choice time or spontaneously sing songs)

**SUPPORTIVE PRACTICES**

**The adult will:**

- Provide different forms of music during group activities and in centers
- Play a variety of music types for listening and for participation
- Introduce children to a variety of songs, finger plays and rhythms
- Encourage children to discuss experiences
- Create opportunities for children to express themselves through a variety of music forms through dance or body movements
- Provide large and small group activities that focus on movement and music participation
- Provide a variety of props for musical expression and movement such as scarves and hoops

**9.1a.2 EXPLORATION**

**STANDARD STATEMENT**

- Use instruments to accompany music or songs

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Explore rhythm instruments from different cultures
- Use rhythm instruments as intended
- Select the music and movement area during free choice

**SUPPORTIVE PRACTICES**

**The adult will:**

- Provide experiences through large and small group activities that focus on movement elements and techniques
- Model appropriate use of instruments
- Call attention to the varying changes and styles in music as children are listening

**9.1a.3 CREATION**

**STANDARD STATEMENT**

- Use imagination and creativity or express self through music and dance
- Use body to represent form in space

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Improvise songs and rhythmic patterns
- Change words or tone of familiar songs to make new songs
- Use dance steps and styles to respond to music
- Represent finger plays or stories using body such as imitating a seed growing into a flower

**SUPPORTIVE PRACTICES**

**The adult will:**

- Provide opportunities through play for children to explore a variety of musical instruments throughout the day, both individually and in groups
- Encourage children to be creative during singing by changing words and song endings
- Use finger plays and stories that children can represent using their bodies

## STANDARD 9.1b: PRODUCTION AND PERFORMANCE: DRAMATIC AND PERFORMANCE PLAY

**BIG IDEA:** Dramatic and performance play is a way to act out reality and fantasy and to solve problems.

**ESSENTIAL QUESTIONS:** How can I express myself through dramatic play? Can I participate in guided performances?

### 9.1b.1 DRAMATIC EXPRESSION

#### STANDARD STATEMENT

- Use nonconforming objects to create representations of real life objects or activities
- Represent fantasy and real-life experiences through pretend play
- Repeat similar play scenarios
- Use pretend play to represent known or anticipated situations



#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Participate with other children in dramatic play situations (mother and baby, doctor and patient)
- Change play based on suggestions and questions by adults
- Imitate roles of people, animals or objects observed in the child's life experiences
- Use props or costumes during dramatic play
- Create props from available materials either realistic or symbolic (stick becomes a wand)

#### SUPPORTIVE PRACTICES

##### The adult will:

- Provide dramatic play opportunities both inside and outside
- Create situations where child can role-play familiar roles or situations (home living, grocery store, restaurants)
- Ask questions and make suggestions to children to extend their play in new directions
- Provide clothing, materials, and props that facilitate make believe play
- Talk with children about real and pretend situations, helping them to understand the difference
- Encourage imagination by providing "pretend props"

### 9.1b.2 PERFORMANCE

#### STANDARD STATEMENT

- Create various voice inflections and facial expressions in play
- Recreate dramatic play experiences for an audience

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Change voice inflection when recreating various characters
- Direct peers or follow peers' instructions about dramatic play schemes
- Act out stories with the guidance of the adult

#### SUPPORTIVE PRACTICES

##### The adult will:

- Use various voice inflection and facial expressions during read-aloud
- Provide props and costumes associated with favorite stories
- Participate in dramatic play events as the audience, providing praise and applause
- Develop teacher-guided dramatic activities such as acting out a story or performing a short play for a special event

## STANDARD 9.1c: PRODUCTION AND PERFORMANCE: VISUAL ARTS

**BIG IDEA:** Visual arts allow individual expression of interests, abilities and knowledge.

**ESSENTIAL QUESTION:** How do I share ideas about personal artwork and the work of others?

### 9.1c.1 REPRESENTATION

#### STANDARD STATEMENT

- Represent experiences, thoughts and ideas through visual arts

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Use a growing number of details and make more realistic representations
- Choose different art materials to represent different types of thoughts or feelings

#### SUPPORTIVE PRACTICES

##### The adult will:

- Encourage children to use materials for individual expression of feelings or thoughts

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**STANDARD 9.1c: PRODUCTION AND PERFORMANCE: VISUAL ARTS** continued

**9.1c.2 CONSTRUCTION**

**STANDARD STATEMENT**

- Combine a variety of materials to create new products

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Use a variety of materials: chalk, paint, crayons, pencils, markers, wood, playdoh
- Draw art work to explore and extend themes in the classroom
- Use line, shape, form, color, texture, design and patterns
- Draw a picture using different colors, varying the intensity of strokes and combining colors
- Manipulate materials in a variety of ways: pounding, squeezing, cutting, rolling
- Use art materials to create art without a model
- Choose to work with art materials during free choice time

**SUPPORTIVE PRACTICES**

**The adult will:**

- Provide opportunities for children to use 3-dimensional materials such as clay, playdoh or wood
- Allow for individual or group projects to extend over several days
- Relate art activities to other classroom experiences
- Provide children with opportunities to explore a variety of art materials and tools in their own way
- Make art materials accessible to children throughout the day for play experiences

**9.1c.3 PERSONAL CONNECTIONS**

**STANDARD STATEMENT**

- Share how artwork is connected to own personal experience

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Talk about the meaning and answer questions about works of art
- Draw/paint a picture of a pet or family member

**SUPPORTIVE PRACTICES**

**The adult will:**

- Encourage children to talk about their artwork
- Display children's art throughout the classroom and building and encourage displays at home

**STANDARD 9.2: HISTORICAL AND CULTURAL CONTEXT OF WORKS IN THE ARTS**

**BIG IDEA:** Every culture has its own art forms.

**ESSENTIAL QUESTION:** Can I identify cultures based on art forms?

**9.2.1 PATTERNS AND THEMES**

**STANDARD STATEMENT**

- Identify cultures represented by various art forms

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Explain that instruments or art forms represent a culture
- Identify the culture of an art form

**SUPPORTIVE PRACTICES**

**The adult will:**

- Display many types of art work
- Show a variety of music and movement forms
- Play many types of music
- Discuss the cultures represented by art forms and instruments such as hieroglyphics (Egyptian), maracas (Spanish)

## STANDARD 9.3: CRITICAL RESPONSE TO WORKS OF ART

**BIG IDEA:** People use characteristics of art to make choices about the types they prefer.

**ESSENTIAL QUESTIONS:** Can I explain why I like or do not like an art form? Can I describe or name an art form?

<b>9.3.1 CRITICAL RESPONSE</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Share an opinion about others' art products</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Observe, applaud or comment on the works of others</li> <li>Share an opinion about art work when asked, "What do you think this is about?"</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Provide opportunities for children to work on creative activities in groups or individually</li> <li>Model and encourage children to positively comment on others' work</li> </ul>
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<b>9.3.2 IDENTIFICATION</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Recognize and name a variety of art forms</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Identify a photo, painting, drawing, dance, and songs</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Display children's professional art throughout the classroom at the child's eye level</li> <li>Discuss the various types and characteristics of photography, painting, dance, performance</li> </ul>
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## STANDARD 9.4: AESTHETIC RESPONSE TO WORKS IN THE ARTS

**BIG IDEA:** Artists create works as a form of self-expression and to share thoughts and ideas.

**ESSENTIAL QUESTIONS:** Can I show that I like an art form through my emotions and language?

<b>9.4.1 EMOTIONAL RESPONSE</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Demonstrate emotional response to viewing or creating various art works</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Respond through body language, facial expression or oral language</li> <li>Respond through humming, swaying, tapping foot to others' work</li> <li>Respond at appropriate times (laugh, sigh) at others' performance</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Ask children how the artwork makes them feel</li> <li>Display children's and professional art throughout the classroom</li> <li>Provide a wide variety of art materials for children's use throughout the day</li> <li>Ask children how the music or movement makes them feel</li> <li>Provide a wide variety of music and movement materials for children's use throughout the day</li> <li>Ask children how the dramatic or performance play makes them feel</li> <li>Provide a wide variety of dramatic and performance play materials for children's use throughout the day</li> </ul>
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## STANDARD 9.4: AESTHETIC RESPONSE TO WORKS IN THE ARTS continued

9.3.2 IDENTIFICATION

### STANDARD STATEMENT

- Recognize and name a variety of art forms

### EXEMPLARS (EXAMPLES)

The learner will:

- Identify a photo, painting, drawing, dance, and songs

### SUPPORTIVE PRACTICES

The adult will:

- Display children's and professional art throughout the classroom at the children eye level
- Discuss the various types and characteristics of photography, painting, dance, performance

## CREATIVE THINKING AND EXPRESSION GLOSSARY

**Aesthetics** – A branch of philosophy that focuses on the nature of beauty, the nature and value of the arts and the inquiry processes and human responses they produce

**Aesthetic Response** – A philosophical reply to works in the arts

**Artistic Choices** – Selections made by artists in order to convey meaning

**Arts Resource** – An outside community asset (e.g., performances, exhibitions, performers, artists)

**Assess** – To analyze and determine the nature and quality of the process/product through means appropriate to the art form

**Community** – A group of people who share a common social, historical, regional or cultural heritage

**Create** – To produce works in the arts using materials, techniques, processes, elements, principles and analysis

**Culture** – The way of life of a particular social, ethnic or age group of people which includes beliefs, customs, arts and behaviors

**Elements** – Core components that support the principles of the arts

**Genre** – A type or category (e.g., music – opera, oratorio; theater – tragedy, comedy; dance – modern, ballet; visual arts – pastoral, scenes of everyday life)

**Humanities** – The branch of learning that connects the fine arts, literature, languages, philosophy and cultural science. The humanities are concerned with the understanding and integration of human thought and accomplishment

**Multimedia** – The combined use of media, such as movies, cd-roms, television, radio, print and the internet for entertainment and publicity

**Original Works in the Arts** – Dance, music, theatre and visual arts pieces created by performing or visual artists.

**Style** – A distinctive or characteristic manner of expression

**Technique** – Specific skills and details employed by an artist, craftsperson or performer in the production of works in the arts

**Timbre** – A unique quality of sound





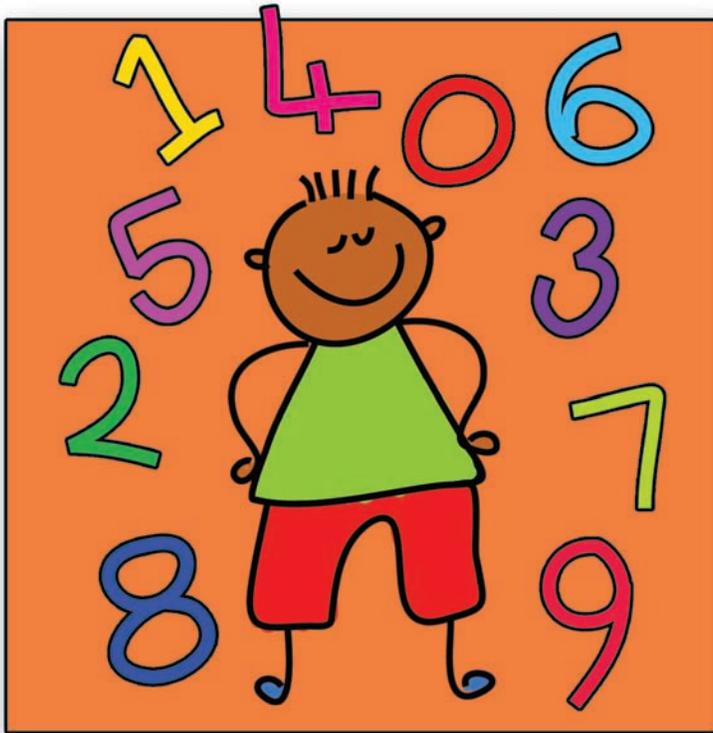
Learning and development is typically divided into learning domains: Physical, Intellectual or Cognitive, Social-Emotional, and Language and Literacy. Cognitive learning refers to the brain's functions that develop thinking, learning, awareness, judgment and information processing. In early childhood, Pennsylvania's Cognitive Domain includes the standards for the Key Learning Areas of Mathematics, Science and Social Studies. While each Key Learning Area contains content-specific information, children learn this information best when activities and materials are integrated together. A science experience that uses graphing (math) and cooperative small group work (social studies) combines thinking and processing to enhance and expand problem solving and critical thinking. Units of study that incorporate all the domains of learning into connected activities and projects scaffold learning and build new understandings and connections.

## COGNITIVE THINKING & GENERAL KNOWLEDGE

- **MATHEMATICAL THINKING AND EXPRESSION: EXPLORING, PROCESSING AND PROBLEM SOLVING**
- **SCIENTIFIC THINKING AND TECHNOLOGY: EXPLORING, INQUIRY AND DISCOVERY**
- **SOCIAL STUDIES THINKING: CONNECTING TO COMMUNITIES**

# MATHEMATICAL THINKING AND EXPRESSION

## EXPLORING, PROCESSING AND PROBLEM SOLVING



**M**athematical learning in the early years relies on children's opportunities to describe and explore the relationship of objects and materials. Children's knowledge and understanding of mathematics is built through active manipulation where children use their senses to build concept knowledge in the areas of numbers and operations, patterns, algebra, geometry, measurement, and comparison. When children truly understand the fundamentals and have mastered the basic mathematical skills they will have the capacity and confidence to excel at learning more advanced mathematics. Teachers facilitate mathematical learning when they encourage children to problem solve, reason, communicate, connect and represent. When engaged in manipulative mathematical activities, children better understand the world around them, begin to use number concepts to communicate their own thoughts and ideas which means they are beginning to think and reason.



### USE OF MANIPULATIVES IN EARLY LEARNING SETTINGS

**S**mall toys or objects may be one of the most important teaching tools for early childhood classrooms. Teddy bear counters, pegs or small blocks support children's learning in math and science as a means of learning complex concepts. As children combine, sort, count or describe the characteristics of these small objects, they are using active, hands-on strategies for problem solving, exploration and experimentation and scaffolding previous knowledge and interactions to learn new information. In addition, children are learning motor control, patterns and concrete ways to understand abstract ideas. All classrooms should provide ample opportunities for children's independent access to manipulatives throughout the daily routine.

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# STANDARD 2.1: NUMBERS, NUMBER SYSTEMS AND NUMBER RELATIONSHIPS

**BIG IDEA:** Mathematic knowledge is built through active manipulation in the areas of numbers and operations by organizing, representing and comparing numbers.

**ESSENTIAL QUESTIONS:** Why do I need to be able to count objects? How do I use numbers every day? How can I record what I count?

## 2.1.1 COUNT AND COMPARE NUMBERS

### STANDARD STATEMENT

- Use counting and numbers as part of play and as a means for determining quantity
- Rote count to 20
- Count up to 10 objects using one to one correspondence
- Name numerals to 10
- Use vocabulary to compare numbers of objects with teacher support

### EXEMPLARS (EXAMPLES)

The learner will:

- Use fingers to represent numbers when counting
- Count blocks in a structure made in the block area
- Practice rote counting to 20
- Count and match up to 10 demonstrating one to one correspondence (napkins to child; papers to child; snack to child)
- Provide a name for some numerals when shown
- Use math vocabulary with teacher support
- Compare number of objects in sets
- Create sets of objects with same and different amounts
- Apply numbers and counting to daily routine (count number holding up hands, children in attendance)

### SUPPORTIVE PRACTICES

The adult will:

- Teach children counting songs, rhymes and chants
- Provide books about numbers and counting
- Provide manipulatives, such as counting bears, magnetic numbers, lacing numbers
- Model strategies to help children keep track of what they are counting
- Provide daily opportunities for children to count and recount objects
- Engage children in counting in daily routines

## 2.1.2 REPRESENT NUMBERS IN EQUIVALENT FORMS

### STANDARD STATEMENT

- Understand number concepts, vocabulary, quantities and written numerals in meaningful ways
- Differentiate numerals from letters

### EXEMPLARS (EXAMPLES)

The learner will:

- Represent quantity using invented forms (tally marks to represent number of objects)
- Match numerals to sets of objects with same number
- Choose numeral from choice of numerals and letters (set of 3 numbers and one letter)

### SUPPORTIVE PRACTICES

The adult will:

- Use number words and numerals including zero, in everyday situations
- Play numeration games
- Read books, poems, chants with numbers and number concepts
- Provide opportunities for writing numerals and representing numbers
- Provide opportunities in learning centers for discriminating letters from numerals
- Ask children to pass out utensils, napkins, cups at snack time to reinforce one to one correspondence

## 2.1.3 CONCEPTS OF NUMBERS AND RELATIONSHIPS

### STANDARD STATEMENT

- Practice combining, separating and naming quantities
- Match a numeral to a set 0 to 5
- Use ordinal number words to describe the position of objects (first, second, last)

### EXEMPLARS (EXAMPLES)

The learner will:

- Use concrete objects to represent quantities up to and including 5
- Represent equivalent forms of the same number using concrete objects and drawings up to and including 5
- Group objects into equal groups
- Group objects and count the number of groups

### SUPPORTIVE PRACTICES

The adult will:

- Provide experiences with numbers through daily routines such as attendance, calendar and weather activities
- Provide opportunities in group instruction for counting ( large, small, individual)
- Model counting objects and matching to numeral
- Provide experiences for choosing sets of different amounts of objects and counting objects

## STANDARD 2.1: NUMBERS, NUMBER SYSTEMS AND NUMBER RELATIONSHIPS

### 2.1.6 CONCEPTS AND APPLICATIONS OF OPERATIONS

#### STANDARD STATEMENT

- Solve oral word problems using concrete objects with assistance
- Visually quantify one to three objects
- Sort objects by two or more attributes
- Identify properties of numbers
- Apply strategies of “counting on”

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Join two sets of objects
- Separate two sets of objects (3 blocks separated into a set of 2 and a set of 1)
- Attempt to attach a numerical value to a set of objects (1 to 3) without counting
- Match a numeral to a set of 1 – 5 objects
- Group objects by attributes
- Practice counting on from sets of 1 – 10 (one....two....three.)
- Practice attaching properties to numbers (10 = 5 and 5; 10 has a 1 and a 0)

#### SUPPORTIVE PRACTICES

##### The adult will:

- Tell stories about joining and separating sets
- Play number recognition games
- Use manipulatives to demonstrate joining and separating sets
- Provide opportunities for quantifying sets of objects (place 3 objects on flannelboard or math mat and ask how many are in that set?)
- Provide materials and activities in learning centers for using manipulatives
- Provide daily practice in counting on (build upon numbers slowly)

## STANDARD 2.2: COMPUTATION AND ESTIMATION

**BIG IDEA:** Students link concepts and procedures as they develop and use computational techniques, including estimation and mental arithmetic, to seek reasonable answers.

**ESSENTIAL QUESTIONS:** How do I estimate? How do I build knowledge through problem solving?

### 2.2.1 FLUENCY IN BASIC FACTS

#### STANDARD STATEMENT

- Observe adult reading number sentences created with manipulatives

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Watch as adult points to set of manipulatives to read number sentence such as 1 circle + 1 circle = 2 circles

#### SUPPORTIVE PRACTICES

##### The adult will:

- Encourage young learner to watch, point and read number sentence along with you

### 2.2.2 COMPUTATION

#### STANDARD STATEMENT

- Solve problems using manipulatives to correspond to given number 1 to 6

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Use counters to make sets up to 6
- Group objects and count number of groups
- Combine and separate objects into groups

#### SUPPORTIVE PRACTICES

##### The adult will:

- Provide opportunities and support learners in their attempts
- Create addition problems that join two sets of the same amount of objects
- Help child divide objects equally among a group of people by assigning one for each person in turn and checking that the quantities are the same (each person gets three strips of colored paper)
- Talk aloud while doing simple computations

CONTINUED...

## STANDARD 2.2: COMPUTATION AND ESTIMATION continued

2.2.4 NUMERICAL ESTIMATION

### STANDARD STATEMENT

- Make estimates of a set of objects up to 6
- Practice checking estimates

### EXEMPLARS (EXAMPLES)

The learner will:

- Solve problems by guessing and checking, using concrete objects (figures out how many napkins are needed for snack)
- Solve problems through trial and error
- Check estimate by counting the number of objects
- Use numbers when guessing amounts

### SUPPORTIVE PRACTICES

The adult will:

- Use open-ended questions to encourage problem solving
- Describe problem solving strategies employed
- Provide support for learners estimating quantity and counting the number of objects
- Provide a variety of objects to handle and manipulate
- Provide group experiences in estimating
- Estimate, count and ask questions such as, "How many?" and "Why?"

## STANDARD 2.3: MEASUREMENT AND ESTIMATION

**BIG IDEA:** Learners will identify attributes, units or systems of measurement and apply a variety of tools to explore the distance, weight, length, height, time and temperature of objects.

**ESSENTIAL QUESTIONS:** What do I understand about the measurement? How can I group objects according to common properties? What can I discover about quantities of objects?

2.3.1 CONCEPTS OF MEASUREMENT

### STANDARD STATEMENT

- Practice measuring by attributes
- Engage in number conservation experiences



### EXEMPLARS (EXAMPLES)

The learner will:

- Select non-standard items to measure objects (hands, shoe lengths, yarn and blocks)
- Identify clocks for telling time, thermometers for telling the temperature
- Label times of day as morning and night
- Match and compare objects of similar size as a beginning understanding of number conservation

### SUPPORTIVE PRACTICES

The adult will:

- Show children how to measure with non-standard items (The shelf is 6 blocks long)
- Ask questions about measurement ("How tall is someone? How many footsteps to the door? How much does someone/something weigh?")
- Use a weekly calendar, indicating special days, birthdays and use terms such as yesterday, today or tomorrow
- Demonstrate and allow children to explore clocks and other time pieces in the classroom (learning centers)
- Engage in activities where objects are matched one to one to assist learner in understanding the number conservation e.g. size versus number of objects; 3 grapefruit in a set is more than 2 apples; size does not denote number or amount

2.3.2 UNITS AND TOOLS OF MEASUREMENT

### STANDARD STATEMENT

- Practice using standard and non-standard measures in everyday situations

### EXEMPLARS (EXAMPLES)

The learner will:

- Use standard measuring items to explore measurement with adult assistance (ruler, yardstick, measuring tape, height charts measuring objects in the classroom)
- Describe the daily routine (e.g. what happens first, before lunch, after lunch, at end of day)

### SUPPORTIVE PRACTICES

The adult will:

- Provide measuring tools (clocks, rulers, scales, thermometers, timers, measuring cups) for children to explore and use in their play
- Anticipate what happens next in the daily schedule
- Relate sequence of events from classroom or home experiences

## STANDARD 2.3: MEASUREMENT AND ESTIMATION continued

<b>2.3.4 CONVERSIONS</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Group objects according to common properties</li> <li>Develop an awareness of seriation through comparison of attributes</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Compare and order objects on the basis of length, capacity, height and weight</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Provide materials to group</li> <li>Provide scaffolding as needed</li> </ul>
<b>2.3.6 MEASUREMENT AND ESTIMATION</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Practice using measurement vocabulary with adult support</li> <li>Practice estimating distance with adult assistance</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Practice using the terms inches, feet, longer, shorter, o'clock with adult assistance</li> <li>Use measuring cups and spoons during cooking activities</li> <li>Guess how many steps to...the door, the hallway, the library</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Provide experiences with measuring through the use of play money, price tags, cash registers, clocks, indoor and outdoor movement activities</li> <li>Engage in cooking experiences with learners</li> <li>Provide recipes, recipe books and measuring tools in the classroom environment</li> <li>Provide opportunities for estimating the distance between places</li> </ul>



## STANDARD 2.4: MATHEMATICAL REASONING AND CONNECTIONS

**BIG IDEA:** Learners use inductive and deductive reasoning to make, check and verify predictions and to develop connections.  
**ESSENTIAL QUESTIONS:** Why do I think my estimation is appropriate? How do I decide what connections there are between objects?

<b>2.4.1 REASONING</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Predict and verify use of environmental objects</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Practice analyzing the size of containers and objects inside them to decide which one to use to hold specific objects or number of objects</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Model, using the appropriate language/vocabulary related to size and shape, the process of estimation</li> <li>Provide opportunities for learners to make mistakes</li> <li>Support choices</li> <li>Ask how and why questions</li> </ul>
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# STANDARD 2.5: MATHEMATICAL PROBLEM SOLVING AND COMMUNICATION

**BIG IDEA:** Learners solve and interpret results in various ways.

**ESSENTIAL QUESTIONS:** How do I apply a variety of concepts, processes and skills to solve problems? How do I present mathematical ideas using words, symbols visual display or technology?

**2.5.1 PROBLEM SOLVING**

**STANDARD STATEMENT**

- Use both familiar and new strategies for solving problems
- Recognize objects, places and ideas by symbols

**EXEMPLARS (EXAMPLES)**

The learner will:

- Ask questions to clarify problems
- Solve problems by guessing and checking
- Solve problems through trial and error
- Identify and think about possible solutions to solve daily problems
- Begin to describe the steps necessary to solve a problem
- Recognize which is the men's room and which is the women's room by the symbols on the outside doors

**SUPPORTIVE PRACTICES**

The adult will:

- Model, using the appropriate language/vocabulary, the process of identifying and solving a problem
- Facilitate classroom discussion to identify the necessary steps and the appropriate order to solve problems
- Create and provide opportunities for learners to engage in problem solving activities (role play)
- Engage learners in symbolic play (use a block to represent a phone)
- Identify and point out symbols during daily activities (numbers, letters, signs)
- Engage learners in interactions that use known strategies in new situations
- Ask open ended questions, encourage conversations, and create classroom activities that encourage learners to explore a variety of possible solutions (set up situations)
- Observe how learners solve problems in the classroom and offer assistance when needed
- Praise and encourage problem solving

**2.5.2 COMMUNICATION**

**STANDARD STATEMENT**

- Communicate the findings from the problem solving process using math vocabulary
- Use pictures to replicate a process

**EXEMPLARS (EXAMPLES)**

The learner will:

- Practice using math vocabulary to describe process of solving problems
- Create pictures to demonstrate a problem
- Practice explaining solutions using classroom materials, such as pictures, graphs, oral presentation and other visual displays
- Ask questions about problem solving process

**SUPPORTIVE PRACTICES**

The adult will:

- Engage learner in the practice of describing the problem solving process (tell me more about...)
- Provide learners with opportunities to explore and ask questions
- Pose open ended questions to promote thinking and reasoning
- Encourage children to use manipulatives or pictures to demonstrate a process



# STANDARD 2.6: STATISTICS AND DATA ANALYSIS

**BIG IDEA:** Learners collect, represent and analyze data to answer questions, solve problems and make predictions.

**ESSENTIAL QUESTIONS:** How do I collect data? How do I explore and display data? How do I talk about data? What patterns can I create and describe?

## 2.6.1 COLLECTION OF DATA

### STANDARD STATEMENT

- Use environmental objects for data collection purposes
- Create graphs cooperatively with an adult and /or other child

### EXEMPLARS (EXAMPLES)

The learner will:

- Use collected objects and create a graph with the class (green apples, red apples, yellow apples; velcro shoes, tie shoes)
- Make tally marks under yes or no on a clipboard while doing a survey of what the group prefers for snack
- Participate in group graphing activities by adding his/her input to a class graph

### SUPPORTIVE PRACTICES

The adult will:

- Engage the learners in activities that involve collecting data
- Provide questions during daily routine that lend themselves to graphing
- Collect objects to use for data collection

## 2.6.2 ORGANIZATION AND DISPLAY OF DATA

### STANDARD STATEMENT

- Organize and display objects by one attribute

### EXEMPLARS (EXAMPLES)

The learner will:

- Explore and display data by answering a yes/no question
- Organize and display data using pictures or tallies

### SUPPORTIVE PRACTICES

The adult will:

- Model organization of data (collections) for graphing purposes
- Provide daily graphing experiences such as recording the weather

## 2.6.3 NUMERICAL SUMMARIES

### STANDARD STATEMENT

- Compare groups of one to five objects

### EXEMPLARS (EXAMPLES)

The learner will:

- Compare data on a graph using vocabulary such as more, same, different
- Sort legos or other small blocks by color, stating, "these are the red blocks and these are the yellow ones"
- Count the number of sunny days on the weather chart

### SUPPORTIVE PRACTICES

The adult will:

- Model, using the appropriate language/vocabulary data on graphs and charts (more, equal, not equal, less)
- Support learners in making comparisons
- Make comparisons part of the daily routine, such as "Do more people walk or ride to school?"

## 2.6.5 INTERPRETATION OF DATA

### STANDARD STATEMENT

- Draw conclusions with adult guidance and questioning

### EXEMPLARS (EXAMPLES)

The learner will:

- Draw conclusions from data charts and graphs with adult assistance (this chart shows 3 red apples and 2 green apples; therefore there are more red apples than green apples; I would need one more green apple to have the same number of red and green)
- Sort Legos or other small blocks by color stating, "These are the red blocks and these are the yellow ones."

### SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities for learners to explore graphs and charts on a regular basis
- Encourage and reinforce learners' efforts in explaining data on a chart (Why do you think...? How did you decide...?)

# STANDARD 2.7: PROBABILITY AND PREDICTIONS

**BIG IDEA:** Learners develop and evaluate predictions that are based on knowledge and data.

**ESSENTIAL QUESTIONS:** What words can I use to describe what is on the graph? How do I predict what will come next? What predictions can I make? How accurate will my predictions be?

## 2.7.1 CALCULATE PROBABILITIES

### STANDARD STATEMENT

- Predict the probability of an event occurring based on observation and prior knowledge with scaffolding

### EXEMPLARS (EXAMPLES)

The learner will:

- Determine the likelihood of an event occurring based on past experience (raise my hand to answer question, will get called upon; shout out, will be reprimanded; 5 follows 4 when rote counting, therefore 5 follows 4 when counting objects; dark clouds usually mean rainy day, not sunny)

### SUPPORTIVE PRACTICES

The adult will:

- Set up situations for young learners to ask questions to predict the probability of an event occurring
- Pose and answer questions
- Model, using the appropriate language/vocabulary, the process of predicting
- Observe and listen for questions being discussed among young learners

## 2.7.3 REPRESENTATIONS OF PROBABILITIES

### STANDARD STATEMENT

- Complete a simple yes/no graph to make a selection with assistance

### EXEMPLARS (EXAMPLES)

The learner will:

- Circle the response to a written question such as "Do you like apples?" Yes or No
- Attach response to the appropriate position on a graph, such as placing name on the column that depicts blue eyes

### SUPPORTIVE PRACTICES

The adult will:

- Provide simple graphs daily for learners to complete with adult assistance
- Have learners complete graph during the daily routine



# STANDARD 2.8: ALGEBRA AND FUNCTIONS

**BIG IDEA:** Learners discover how objects are related to each other using models, patterns and functions involving numbers, shapes, and graphs in problem solving situations.

**ESSENTIAL QUESTIONS:** How do I respond to routines? How do I use manipulatives to show relationships? What patterns can I create and describe?

## 2.8.1 ALGEBRAIC PROPERTIES

### STANDARD STATEMENT

- Compare quantities of concrete objects

### EXEMPLARS (EXAMPLES)

The learner will:

- Identify how objects are the same and different in quantity, pattern, or use

### SUPPORTIVE PRACTICES

The adult will:

- Help children recognize and describe attributes
- Provide varied materials for sorting and classifying (shells, cereal, pebbles, and buttons)
- Help children describe similar and different objects

## 2.8.2 ALGEBRAIC MANIPULATIONS

### STANDARD STATEMENT

- Practice and count using numbers as a means of determining quantity
- Practice using concrete objects to portray simple story

### EXEMPLARS (EXAMPLES)

The learner will:

- Count sets of objects and then verbalize how many are in the set
- Add one or two objects to a set and tell a number story about the set

### SUPPORTIVE PRACTICES

The adult will:

- Provide a variety of manipulatives to use for counting and quantifying
- Model using appropriate math vocabulary the process of using objects to portray a story
- Provide opportunities for telling stories with manipulatives
- Provide assistance when necessary



## 2.8.3 PATTERNS

### STANDARD STATEMENT:

- Identify and describe patterns
- Recognize and extend simple patterns

### EXEMPLARS (EXAMPLES)

The learner will:

- Identify patterns in the environment, such as the stripes on a flag
- Clap out rhythmic patterns, such as clap-clap-snap, clap-clap-snap
- Recognize and practice extending simple repeating patterns using manipulatives, such as adding a blue block to the end of a pattern – blue, white, blue, white, XXX (blue)

### SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities for children to identify and describe patterns
- Model creating simple patterns
- Have children recreate patterns using lacing beads, geoboards, and other manipulatives
- Encourage, model and discuss patterns (what is missing? Why do you think that is a pattern?)
- Engage children in finding and patterns in the environment, (number patterns on number charts, calendars, color patterns)
- Draw children's attention to various patterns in the environment (I see a pattern on your shirt – blue stripe, red, strip, blue stripe)

# STANDARD 2.9: GEOMETRY

**BIG IDEA:** Children identify, name and describe a variety of shapes in many ways.

**ESSENTIAL QUESTIONS:** What makes shapes different from each other? What shapes can we see in our environment? How do shapes fit together and come apart? What attributes do shapes possess? How can shapes be sorted?

## 2.9.1 DEFINITIONS, PROPERTIES AND RELATIONS

### STANDARD STATEMENT

- Identify and name simple three-dimensional shapes
- Replicate simple three-dimensional shapes
- Determine the attributes of basic shapes

### EXEMPLARS (EXAMPLES)

#### The learner will:

- Recognize and describe the attributes of geometric figures
- Match and sort dimensional objects according to attributes
- Point out specific geometric figures in environment
- Create shapes from objects in environment (e.g. playdoh, popsicle sticks)
- Name common geometric shapes in the environment, such as the sun is a circle or the block is a square

### SUPPORTIVE PRACTICES

#### The adult will:

- Converse with learners about geometric shapes in the environment
- Take children on a shape walk looking for geometric shapes in the environment
- Provide books about geometric shapes
- Provide shape templates, puzzles, attribute blocks, parquetry and pattern blocks in centers (e.g. different textures, sizes, materials)
- Provide experiences in making shapes with playdoh, geoboards, popsicle sticks, pattern blocks

## 2.9.2 TRANSFORMATIONS AND SYMMETRY

### STANDARD STATEMENT

- Observe symmetry
- Create a symmetrical design from a model

### EXEMPLARS (EXAMPLES)

#### The learner will:

- Identify symmetrical design
- Create a symmetrical design with assistance (folded paper with blob of paint)

### SUPPORTIVE PRACTICES

#### The adult will:

- Provide opportunities for creating symmetrical designs
- Provide materials to use in creation of symmetrical designs

## 2.9.3 COORDINATE GEOMETRY

### STANDARD STATEMENT

- Practice using directionality and appropriate vocabulary with assistance
- Demonstrate an understanding of directionality, order and positions of objects

### EXEMPLARS (EXAMPLES)

#### The learner will:

- Follow directions that use positional words (in, on, under, over, next to, between, beside, above, below, front, back)
- Use positional words in play (e.g. "My truck is under the table.")
- Use geoboards to create shapes with rubber bands

### SUPPORTIVE PRACTICES

#### The adult will:

- Use music and movement experiences to explore positions in space
- Model and provide experiences and opportunities for learners to place objects in positions in space (small group, large group, learning centers)

# MATHEMATICAL THINKING AND EXPRESSION GLOSSARY

**Addends** – Numbers used in mathematical operation of addition

**Algebraic Expression** – A group of numbers, symbols and variables that express a single series of operations

**Angle** – A geometric figure consisting of two rays with a common endpoint

**Ascending Order** – A listing in which numbers or terms are organized in increasing value

**Bar Graph** – A graph in which horizontal or vertical bars represent data

**Concrete Objects** – Physical objects used to represent mathematical situations

**Counting On** – Given two sets of objects in which to find the sum, learner counts one set and then counts on from the first set to the second set (3 apples in one set; 1 apple in other set- learner says 1-2-3 and then 4; there are 4 in all)

**Data** – Information gathered by observation, questioning or measurement, usually expressed with numbers

**Descending** – An order in which numbers or terms are organized in decreasing value

**Estimate** – A close rather than exact answer

**Fractional Part** – Part of a whole or part of a group that is less than a whole

**Function** – A rule that describes the commonalities between two patterns

**Graph** – A pictorial device that shows a relationship between variables or sets of data

**Manipulatives** – A wide variety of physical materials, objects and supplies that students use to foster mathematical learning

**Non Standard Measurement** – A measure that is not determined by the use of standard units (paper clips, blocks)

**Numerical Operations** – Place value, number sense, counting, correspondence, comparison, ordering numbers, addition/subtraction (joining/separating sets)

**Number Sense** – Understanding of numbers and their quantities

**Ordinal Number** – A whole number that names the position of an object in a sequence

**Pattern** – A set or sequence of shapes or numbers that are repeated in a predictable manner

**Pictograph** – A graph that uses pictures or symbols to represent data

**Place value** – The value of the position of a digit in a numeral

**Predictions** – Use of base information to produce an approximation of change or result

**Probability** – The measure of the likelihood of an event occurring

**Reflection** – A transformation creating a mirror image of a figure on the opposite side of a line

**Seriation** – Arranging objects in order by size or position in space (arrange in a series of pattern)

**Spatial Sense** – Building and manipulating mental representations of two and three dimensional objects

**Standard Measurement** – A measure determined by the use of standard units such as, inches, feet, pounds, cups, pints, gallons

**Symbol** – A sign used to represent something

**Symmetry** – An attribute of a shape or relation; an exact reflection of a form on opposite sides of a dividing line or place

**Trigonometry** – Relationship between the sides and angles of triangles

**Whole numbers** – The set of numbers consisting of the counting numbers and zero



# SCIENTIFIC THINKING AND TECHNOLOGY

## EXPLORING, INQUIRY AND DISCOVERY



All young children are naturally curious about their environment and the world around them and learn best when allowed to actively explore using their senses. These experiences provide the foundation for abstract and scientific thought. Students, who are given opportunities to conduct experiments, gather data and make conclusions are developing skills that support discovery about the natural world and the scientific process. For the young learner scientific concepts can be incorporated throughout the key areas of early learning; for example, children use pretend play to explore and manipulate materials, creative arts to express their ideas, and literacy and language arts to research answers to questions.

### ASSESSMENT



Child assessment is an integral component of early childhood programs. When combined with observation, curriculum development and appropriate teaching practices, assessment provides the foundation for understanding children's growth and development. Ongoing and frequent reviews of children's accomplishments and progress enable teachers to learn how children change over time and provide information for developing responsive and appropriate instruction. Teachers use authentic assessment when they combine observation, portfolio collection, and parent report with research-based, standards-aligned curriculum-embedded instruments to obtain a clear picture of a child's interests, abilities and areas for focus.

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**STANDARD 3.1a: BIOLOGICAL SCIENCES: LIVING AND NON-LIVING ORGANISMS**

**BIG IDEA:** There are a variety of living and non-living things.

**ESSENTIAL QUESTIONS:** Can I categorize plants and animals? Can I state what living things need to survive? Can I name parts of living things?

**3.1a.1 COMMON CHARACTERISTICS OF LIFE**

**STANDARD STATEMENT**

- Recognize the difference between living and non living things
- Categorize common living things into plants and animals.
- State that living things need air, food and water to survive



**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Sort objects by living and non-living such as rock to plant or dog to doll
- Describe observations accurately
- Compare observations with others
- Sort pictures into plants and animals
- Draw pictures of plants or animals
- Describe basic needs of living things

**SUPPORTIVE PRACTICES**

**The adult will:**

- Include live animals and plants along with models, stuffed animals, plastic animals and plants and pictures and posters in the classroom
- Display worm farms, bird feeders or ant hills for observation
- Encourage documentation of observations in journals with words and pictures
- Read books about plants and animals
- Provide classroom with gardening tools, for inside and outside use
- Take nature walks
- Set up a science table and exploration area

**3.1a.3 LIFE CYCLES**

**STANDARD STATEMENT**

- Identify that plants and animals have life cycles

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Observe changes in plants or animals such as beans sprouting or animals' fur thickening
- Observe the effect of darkness and light on growing plants

**SUPPORTIVE PRACTICES**

**The adult will:**

- Encourage documentation of observations in journals with words and pictures

**3.1a.5 FORM AND FUNCTION**

**STANDARD STATEMENT**

- Identify parts of living things

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Tell the parts of a person, an animal or a plant
- Draw a picture of a person, an animal or plant including most of the major observable features

**SUPPORTIVE PRACTICES**

**The adult will:**

- Provide pictures and real objects for observation
- Discuss the names of parts such as root, stalk, bud or hoof, wing, claw

**3.1a.8 UNIFYING THEMES**

**STANDARD STATEMENT**

- Identify that plants and animals have different kinds of parts

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Identify that people have legs and plants have roots
- Describe difference and similarities in animals of the same species such as, "One cat is striped" and "Two dogs have floppy ears"

**SUPPORTIVE PRACTICES**

**The adult will:**

- Discuss the names of plant and animal parts
- Compare and contrast animals
- Compare and contrast plants
- Discuss how plants and animals are similar and different

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## STANDARD 3.1a: BIOLOGICAL SCIENCES: LIVING AND NON-LIVING ORGANISMS

3.1a.9 SCIENCE AS INQUIRY

### STANDARD STATEMENT

- Use the five senses as tools with which to observe, classify, collect information and describe observations

### EXEMPLARS (EXAMPLES)

The learner will:

- Ask questions about observations
- Collect objects during nature walk
- Note observations using all senses, "This feels soft" or "This flower smells pretty"
- Taste a variety of foods

### SUPPORTIVE PRACTICES

The adult will:

- Keep a classroom pet
- Provide materials for children to sort, examine and explore at the science table
- Encourage use of all senses during observations

## STANDARD 3.1b: BIOLOGICAL SCIENCES: GENETICS

**BIG IDEA:** There are a variety of living and non-living things.

**ESSENTIAL QUESTIONS:** Can I identify physical characteristics of my family? Can I tell what grows from seeds, eggs or babies?

3.1b.1 HEREDITY

### STANDARD STATEMENT

- Identify similar characteristics of own family such as hair color, eye color and height

### EXEMPLARS (EXAMPLES)

The learner will:

- Note things that are similar among family members when looking at photographs

### SUPPORTIVE PRACTICES

The adult will:

- Display photos of families
- Discuss similarities among members

3.1b.2 REPRODUCTION

### STANDARD STATEMENT

- Describe that seeds grow into plants, eggs hatch and babies grow into adults

### EXEMPLARS (EXAMPLES)

The learner will:

- Identify how plants and animals begin and what they become
- Use proper names for animal offspring such as calf rather than baby cow

### SUPPORTIVE PRACTICES

The adult will:

- Display pictures that show life cycles
- Discuss how the adult begins as a seed, egg or baby
- Provide non-fiction literature connections

3.1b.5 UNIFYING THEMES

### STANDARD STATEMENT

- Describe observable patterns in objects

### EXEMPLARS (EXAMPLES)

The learner will:

- Identify a pattern when presented such as AB, ABC or ABCD
- Notice patterns in objects, such as the stripes on shirts or the spots on a dog's fur

### SUPPORTIVE PRACTICES

The adult will:

- Provide natural materials to make patterns
- Provide examples of patterns for students to use as models
- Describe patterns with children to model language
- Show examples of patterns in natural objects like leaves and shells

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## STANDARD 3.1c: BIOLOGICAL SCIENCES: EVOLUTION

**BIG IDEA:** There are a variety of living and non-living things.

**ESSENTIAL QUESTIONS:** Can I choose clothing that will be safe and comfortable for weather conditions? Can I describe changes in home or school environments? Do I ask questions about what I observe?

### 3.1c.2 ADAPTATION

#### STANDARD STATEMENT

- Match types of clothing to seasonal weather conditions
- Identify changes that occur in animals during the seasons

#### EXEMPLARS (EXAMPLES)

The learner will:

- Match pictures of clothing to season
- Dress toys and dolls for weather conditions
- Choose appropriate seasonal clothing for self
- Describe that some animals, such as a bear, sleep when it gets cold
- Notice the birds or geese that are flying south or north in the fall and spring
- Notice that dogs' fur gets thicker in the winter

#### SUPPORTIVE PRACTICES

The adult will:

- Read books about animals and their adaptation to the season changes
- Take outside walks to watch for bird migration and to notice weather changes
- Provide different types of seasonal clothing in the dramatic play area
- Talk about and graph the changes in temperature and children's adaptations, such as "How many wore their boots today?"

### 3.1c.3 UNIFYING THEMES

#### STANDARD STATEMENT

- Describe change in home and school environments

#### EXEMPLARS (EXAMPLES)

The learner will:

- Notice and explain changes at home such as new carpeting or a new pet
- Notice and explain changes at school such as new materials or room arrangement

#### SUPPORTIVE PRACTICES

The adult will:

- Ask children about happenings at home
- Extend thinking to ask how this makes things different
- Encourage children to consider why changes are made at school

### 3.1c.4 SCIENCE AS INQUIRY

#### STANDARD STATEMENT

- Discuss observations and discoveries

#### EXEMPLARS (EXAMPLES)

The learner will:

- Investigate new materials and displays
- Ask questions about observations
- Describe discoveries during exploration

#### SUPPORTIVE PRACTICES

The adult will:

- Provide tools for exploration including magnifying glass, magnets, microscope, color paddles, tweezers, eye droppers, scale
- Display materials for exploration such as rocks, stones, seed pods, gourds, nests, pine cones, fossils, feathers
- Ask questions about discoveries during play such as "How did you get that block to stay up there?"

## STANDARD 3.2a: PHYSICAL SCIENCES: CHEMISTRY

**BIG IDEA:** Physical properties help us to understand the world.

**ESSENTIAL QUESTIONS:** What happens when I combine objects or substances? How do I discover the properties of objects?

### 3.2a.1 PROPERTIES OF MATTER

#### STANDARD STATEMENT

- Describe objects according to size, shape, color or properties of matter

#### EXEMPLARS (EXAMPLES)

The learner will:

- Collect leaves and sort them according to shape, color or edges
- Describe their collection

#### SUPPORTIVE PRACTICES

The adult will:

- Encourage children to collect, sort, classify and describe many materials
- Use the appropriate science vocabulary

## STANDARD 3.2a: PHYSICAL SCIENCES: CHEMISTRY continued

### 3.2a.2 STRUCTURE OF MATTER

#### STANDARD STATEMENT

- Recognize the different types of matter

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Observe experiments with solids, liquids and gases
- Notice the different properties of matter in specific materials, such as milk is a liquid or a rock is hard and solid

#### SUPPORTIVE PRACTICES

##### The adult will:

- Conduct experiments that use solids, liquids and gas such as melting an ice cube and refreezing it or adding powdered drink mix to water
- Talk about the properties of objects, such as the bunny is soft or maple syrup is sticky

### 3.2a.4 REACTIONS

#### STANDARD STATEMENT

- Experiment with changes in matter
- Experiment with changes in substances when combined

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Shake cream in a jar to make butter
- Observe differences in water, such as an ice cube or snow melting and freezing
- Notice changes in food substances during cooking, such as chocolate or cheese melting when heated
- Observe what happens when water is mixed with soil
- Add crackers to soup and talk about what happens
- Mix colors of paint and discuss the changes

#### SUPPORTIVE PRACTICES

##### The adult will:

- Provide materials for children to mix and combine, such as ice, snow and water
- Cook with learners and talk about the changes that occur when foods are combined
- Ask for predictions about what might happen when one substance is combined with another
- Talk about observable changes in matter, such as a balloon being blown up or ice cream at room temperature
- Conduct experiments where learners predict and analyze outcomes

## STANDARD 3.2b: PHYSICAL SCIENCES: PHYSICS

**BIG IDEA:** Physical properties help us to understand the world.

**ESSENTIAL QUESTIONS:** Can I describe motion? Can I make predictions about energy? How can I categorize sounds? Do I participate in scientific investigations?

### 3.2b.1 FORCE AND MOTION OF PARTICLES AND RIGID BODIES

#### STANDARD STATEMENT

- Explore and describe motion of toys and objects

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Notice the speed of a toy truck if it is pushed on carpet or hard surface
- Notice the motion of swings and jump ropes on the playground
- Comment about the motion of the boat as waves are created
- Demonstrate understanding of fast, slow, back and forth

#### SUPPORTIVE PRACTICES

##### The adult will:

- Encourage children to extend thinking by asking why questions
- Describe the motion of objects and toys as children are engaged in play

### 3.2b.2 ENERGY STORAGE AND TRANSFORMATIONS: CONSERVATION LAWS

#### STANDARD STATEMENT

- Observe demonstrations and make predictions about basic energy types and sources

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Observe wind blowing or the sun melting snow
- Create a painting using a straw to blow paint onto paper
- Guess what might happen to a kite when the wind blows or dies down

#### SUPPORTIVE PRACTICES

##### The adult will:

- Provide experiences involving wind, water and solar power for children to observe
- Encourage them to make predictions about what might happen

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**STANDARD 3.2b: PHYSICAL SCIENCES: PHYSICS** continued

**3.2b.4 ELECTRICAL AND MAGNETIC ENERGY**

**STANDARD STATEMENT**

- Use magnets to explore and sort materials

**EXEMPLARS (EXAMPLES)**

The learner will:

- Use magnets to test many items by placing the magnet to see if it sticks
- Sort items by magnetic and non-magnetic

**SUPPORTIVE PRACTICES**

The adult will:

- Provide many items for children to use with magnets
- Provide bar magnets as well as refrigerator magnets for exploration

**3.2b.5 NATURE OF WAVES AND SOUND**

**STANDARD STATEMENT**

- Categorize and create sounds based on different attributes

**EXEMPLARS (EXAMPLES)**

The learner will:

- Listen to sounds from outside or inside and identify if it is loud, soft, high, low
- Listen to sounds and identify the source
- Make sounds with instruments

**SUPPORTIVE PRACTICES**

The adult will:

- Provide materials for creating sounds
- Use vocabulary to describe sounds regarding volume or pitch
- Provide instruments for exploration

**3.2b.6 UNIFYING THEMES**

**STANDARD STATEMENT**

- Predict a reaction based on previous experiences

**EXEMPLARS (EXAMPLES)**

The learner will:

- Identify items that will sink based on previous attempts

**SUPPORTIVE PRACTICES**

The adult will:

- Encourage children to experiment, observe and record information from experiences

**3.2b.7 SCIENCE AS INQUIRY**

**STANDARD STATEMENT**

- Participate in scientific investigations

**EXEMPLARS (EXAMPLES)**

The learner will:

- Experiment with objects or ideas to obtain a result
- Ask and answer questions
- Make predictions about an outcome

**SUPPORTIVE PRACTICES**

The adult will:

- Set up opportunities for children to assist or experiment on their own
- Ask questions
- Encourage children to create predictions
- Encourage children to create questions

**STANDARD 3.3a EARTH AND SPACE SCIENCES: EARTH STRUCTURE, PROCESSES AND CYCLES**

**BIG IDEA:** Interactions occur on earth and in space.

**ESSENTIAL QUESTIONS:** Can I identify earth forms? Can I sort different types of earth? Do I know a variety of uses for water? Can I identify and use weather observation and tools for information? Can I verify predictions?

**3.3a.1 EARTH FEATURES AND THE PROCESSES THAT CHANGE IT**

**STANDARD STATEMENT**

- Identify earth forms in pictures

**EXEMPLARS (EXAMPLES)**

The learner will:

- Identify mountains, hills and flat land in pictures
- Create mountains or hills in the sand table
- Notice that she/he is walking uphill or downhill during a walk

**SUPPORTIVE PRACTICES**

The adult will:

- Provide pictures of a variety of land forms that children may encounter
- Read books about mountains, hills and flat land
- Take walks that include different types of terrain, such as a hill or flat land
- Provide opportunities to represent different types of terrain through sand and soil

**STANDARD 3.3a EARTH AND SPACE SCIENCES: EARTH STRUCTURE, PROCESSES AND CYCLES**

**3.3a.2 EARTH'S RESOURCES AND MATERIALS**

**STANDARD STATEMENT**

- Sort different types of earth

**EXEMPLARS (EXAMPLES)**

The learner will:

- Sort earth into rocks, soil and sand
- Use a hand lens to discover details

**SUPPORTIVE PRACTICES**

The adult will:

- Provide soil and containers for planting
- Display rocks, stones and pebbles of different colors and shapes for sorting
- Encourage children to compare and contrast types of earth

**3.3a.4 WATER**

**STANDARD STATEMENT**

- Observe and explore water in solid and liquid states
- Identify a variety of uses for water

**EXEMPLARS (EXAMPLES)**

The learner will:

- Play with water in the water table
- Identify ice and explore it
- Identify ways we use water such as drinking, washing, watering plants

**SUPPORTIVE PRACTICES**

The adult will:

- Provide opportunities for exploration with water and ice
- Make a list of ways we use water
- Provide supporting literature

**3.3a.5 WEATHER AND CLIMATE**

**STANDARD STATEMENT**

- Identify season that corresponds with observable conditions
- Identify how weather affects daily life
- Identify different types of precipitation
- Identify a thermometer as a tool for measuring temperature



**EXEMPLARS (EXAMPLES)**

The learner will:

- Name the four seasons and an observable condition for that season such as falling leaves, snow, rain, buds on trees or green grass
- Sort pictures of activities clothing and toys according to the types of weather and season they would be connected to such as sled with snow, bathing suit with sun
- Identify snow, rain, drizzle
- Look at a thermometer to see what the temperature might be
- Use a thermometer for doctor play in the dramatic play area

**SUPPORTIVE PRACTICES**

The adult will:

- Take nature walks to observe changes in the seasons
- Talk about the weather conditions daily
- Hang a thermometer outdoors and read it daily to determine the temperature
- Talk about the purpose of a thermometer

**3.3a.6 UNIFYING THEMES**

**STANDARD STATEMENT**

- Examine change through simple observation

**EXEMPLARS (EXAMPLES)**

The learner will:

- Note changes that occur to plants, animals or the environment during walks
- Notice the growth of classroom plants or pets
- Identify changes in weather, such as "I had to wear a coat today because it got cold."
- Recognize that changes in weather or the earth and sky relate to changes in temperature or climate, such as "leaves turn colors when the air turns cooler"

**SUPPORTIVE PRACTICES**

The adult will:

- Plant seeds and measure changes that occur daily. Ask children to record the changes through pictures or graphs
- Take children on walks to notice changes in the weather or environment
- Encourage children to make journal entries about noticeable changes in the environment
- Write stories about the growth of a classroom pet
- Display pictures or sequencing cards that show the growth or changes over time, such as a seed, a seedling, a thin tree, a mighty oak

## STANDARD 3.3b: EARTH AND SPACE SCIENCES: ORIGIN AND EVOLUTION OF THE UNIVERSE

**BIG IDEA:** Interactions occur on Earth and in space.

**ESSENTIAL QUESTION:** Can I identify features in space?

### 3.3b.1 COMPOSITION AND STRUCTURE

#### STANDARD STATEMENT

- Identify the characteristics of the sun, moon, stars and clouds

#### EXEMPLARS (EXAMPLES)

The learner will:

- Talk about things that can be found in the day or night sky
- Notice different types of clouds
- Explore shadows made from the sun

#### SUPPORTIVE PRACTICES

The adult will:

- Provide flashlights for use
- Offer opportunities to trace shadows on the sidewalk
- Display items for sorting by day or night use, such as sunglasses, visors, flashlights
- During walks observe clouds and discuss their shapes
- Read books about day and night, stars, or clouds

## STANDARD 3.4a: SCOPE OF TECHNOLOGY

**BIG IDEA:** Technology impacts daily living.

**ESSENTIAL QUESTIONS:** Can I identify the function of simple technology? Do I choose the right technology for a task?

### 3.4a.1 CHARACTERISTICS OF TECHNOLOGY

#### STANDARD STATEMENT

- Identify examples of technology

#### EXEMPLARS (EXAMPLES)

The learner will:

- State examples of technology such as telephone, cell phone, television, DVD
- Use a pretend phone during dramatic play
- Take pretend pictures of classroom objects

#### SUPPORTIVE PRACTICES

The adult will:

- Provide technological equipment that children can use independently during play, such as pretend telephones, tape recorders, and computers
- Include objects that children can take apart and put back together
- Provide non-working real objects for children to investigate, such as hair dryers, old typewriters, or cassette players
- Display pictures that reflect technology in use

### 3.4a.3 TECHNOLOGY CONNECTIONS

#### STANDARD STATEMENT

- Identify the function of simple technological objects
- Identify the appropriate technology to complete a task

#### EXEMPLARS (EXAMPLES)

The learner will:

- Describe the uses of cameras, cell phones and/or DVD players
- Use models of technological equipment during pretend play in the dramatic play area
- Perform basic tasks using technological objects, such as turning on a computer or pushing the start button on a tape recorder
- Describe that a phone is used to call someone and a video camera is used to record movies

#### SUPPORTIVE PRACTICES

The adult will:

- Talk about the purposes of technological items
- During class discussions, identify the technology that could help learners find out more
- Discuss how to choose the correct tool for the purpose
- Model the use of technology in the classroom
- Read books that include characters using technology

## STANDARD 3.4c: TECHNOLOGY AND ENGINEERING DESIGN

**BIG IDEA:** Technology impacts daily living.

**ESSENTIAL QUESTIONS:** Can I use simple tools as intended?

### 3.4c.1 DESIGN ATTRIBUTES

#### STANDARD STATEMENT

- Use simple tools and materials



#### EXEMPLARS (EXAMPLES)

The learner will:

- Use tools such as a ruler, a hammer, a magnifying glass or a flashlight

#### SUPPORTIVE PRACTICES

The adult will:

- Provide simple household and classroom tools for children to use independently
- Create activities that require the use of simple tools

## STANDARD 3.4e: TECHNOLOGY: THE DESIGN WORLD

**BIG IDEA:** Technology impacts daily living.

**ESSENTIAL QUESTIONS:** Do I use medical equipment correctly? Can I use wind power to make something move? Can I identify types of communication devices and their functions? Can I identify construction vehicles, tools and materials?

### 3.4e.1 MEDICAL TECHNOLOGIES

#### STANDARD STATEMENT

- Practice using medical equipment and materials

#### EXEMPLARS (EXAMPLES)

The learner will:

- Attempt to use model and real medical equipment as it is used at the doctor's office during play

#### SUPPORTIVE PRACTICES

The adult will:

- Provide model and real medical equipment for children to use in the dramatic play area
- Use the technical names of equipment when describing it to children
- Read books about characters using medical equipment or non-fiction text about health care
- Discuss children's experiences with medical care

### 3.4e.3 ENERGY AND POWER TECHNOLOGIES

#### STANDARD STATEMENT

- Explore wind power

#### EXEMPLARS (EXAMPLES)

The learner will:

- Fly a kite
- Spin a pinwheel
- Float a sailboat across water
- Observe a flower blowing in the breeze
- Describe that trees' limbs move as a result of the wind

#### SUPPORTIVE PRACTICES

The adult will:

- Create opportunities for learners to experiment with wind power to make things move
- Provide materials for children to make paper airplanes or pinwheels and encourage them to try them out
- Take children outside on a windy day to use pinwheels or kites
- Play games such as blowing a ping pong ball across a surface
- Use outdoor time to observe the clouds moving across the sky on a windy day

## STANDARD 3.4e: THE DESIGN WORLD continued

### 3.4e.4 INFORMATION AND COMMUNICATION TECHNOLOGIES

#### STANDARD STATEMENT

- Identify communication devices in the home
- Identify parts of a computer
- Use a computer to run specific software independently

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Identify telephone, cell phone, and computer
- Name the parts of a computer, such as monitor, screen, mouse or keyboard
- Use a computer to run a program independently

#### SUPPORTIVE PRACTICES

##### The adult will:

- Discuss the ways we can communicate at home
- Use the correct vocabulary and label the corresponding parts of the computer
- Allow children to work on developmentally appropriate computer programs independently during choice time

### 3.4e.5 TRANSPORTATION TECHNOLOGIES

#### STANDARD STATEMENT

- Classify types and uses of transportation vehicles

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Sort vehicles as those that are used on ground, on water or in the air or as those that transport a few people or many people
- Sort vehicles by use or characteristics, such as those that are used on the ground or water
- Describe the different characteristics and uses between a bus, car, bicycle or airplane

#### SUPPORTIVE PRACTICES

##### The adult will:

- Display pictures of many kinds of transportation
- Provide a variety of transportation toys
- Encourage children to sort and classify vehicles using a variety of categories
- Sing the Wheels on the Bus
- Perform a group activity where children go on a pretend train ride; they purchase tickets, board the train, find a seat, chug down the track, and disembark
- Talk about the modes of transportation needed to get to school, to take a trip to California, and to go to the doctor

### 3.4e.7 CONSTRUCTION TECHNOLOGIES

#### STANDARD STATEMENT

- Identify construction vehicles, simple tools and materials
- Build structures using a variety of block types

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Identify the types of tools and materials needed in construction, such as hammers, screwdrivers, nails or measuring tapes, and hard hats
- Talk about construction vehicles, such as bull-dozer, cement trucks or dump trucks and their purpose
- Put together blocks to create a tower or building, identifying that larger or heavier blocks belong on the bottom
- Use wood construction vehicles to move blocks or objects
- Practice using hammers and nails or screws and screwdrivers in a construction learning center

#### SUPPORTIVE PRACTICES

##### The adult will:

- Provide a variety of blocks or materials for building
- Offer non-traditional materials from which buildings or structures can be made, such as stones, sticks, or clay
- Include wood dump trucks, cement mixers and other construction vehicles in the block area
- Display pictures of construction sites
- Set up a construction zone with hard hats, workbench, and tools for children to use
- Include maps and blueprints in the block area

## STANDARD 4.1: ENVIRONMENT AND ECOLOGY

**BIG IDEA:** We are impacted and have impact on our environment.

**ESSENTIAL QUESTIONS:** Can I name the bodies of water in the local area? Can I name some things that can be recycled? How does litter have an impact on the environment? What kinds of things are produced on a farm? What kinds of cycles are evident in the environment? Can I name some dinosaurs? Can I name a variety of shelters that humans use?

### 4.1 WATERSHEDS AND WETLANDS

#### STANDARD STATEMENT

Identify bodies of water

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Name lakes, streams, creeks and puddles in the local area

#### SUPPORTIVE PRACTICES

##### The adult will:

- Name and discuss local bodies of water
- Read books about different bodies of water

**STANDARD 4.1: ENVIRONMENT AND ECOLOGY** continued

**4.2 RENEWABLE AND NON RENEWABLE RESOURCES**

**STANDARD STATEMENT**

- Identify objects that can be recycled
- Discuss the purpose of recycling

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Sort objects into those things that can be recycled and those things that cannot
- Name objects that can be recycled
- Practice recycling of classroom objects as part of the classroom routine

**SUPPORTIVE PRACTICES**

**The adult will:**

- Provide recycling bins for children to use
- Discuss what can be recycled such as aluminum cans, plastic bottles, glass jars
- Create a list of items that can be recycled or reused such as a cloth grocery bag

**4.3 ENVIRONMENTAL HEALTH**

**STANDARD STATEMENT**

- Identify how litter can have a negative impact on animals and the environment

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Participate in experiments that show how litter can impact the environment
- Identify ways that litter should be handled

**SUPPORTIVE PRACTICES**

**The adult will:**

- Create experiments about litters' impact on environment
- Show pictures and videos about the impact on animals
- Clean up the playground or street near the classroom

**4.4 AGRICULTURE AND SOCIETY**

**STANDARD STATEMENT**

- Describe the purpose of a farm
- Identify the products that are produced on a farm
- Describe the people, animals and equipment that are found on a farm

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Name the farmer and the jobs she/he does
- Talk about corn that grows on a farm or milk that comes from cows that live on a farm
- Name basic farm structures and equipment such as a barn or tractor

**SUPPORTIVE PRACTICES**

**The adult will:**

- Read books about farms and farmers
- Show pictures and videos about the kinds of things that come from a farm
- Take a field trip to a farm
- Provide materials for dramatic play representations of farm life

**4.6 ECOSYSTEMS AND THEIR INTERACTIONS**

**STANDARD STATEMENT**

- Observe events that occur in a cycle

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Observe and record what happens to a tree throughout a year or the growth of a seed into a plant
- Discuss the changes as things that happen in a cycle
- Talk about the changes of a caterpillar into a butterfly or an egg hatching into a chicken

**SUPPORTIVE PRACTICES**

**The adult will:**

- Read books about cycles in nature such as The Tiny Seed or books about seasonal changes
- Include sequencing cards where children order life cycle events, such as a tree growing from a seedling or an egg hatching

**4.7 THREATENED, ENDANGERED AND EXTINCT SPECIES**

**STANDARD STATEMENT**

- Identify some species that are extinct

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Describe what animals and plants need to stay alive
- Name some dinosaurs
- Talk about why dinosaurs no longer exist

**SUPPORTIVE PRACTICES**

**The adult will:**

- Provide dinosaur toys
- Use the correct names when discussing dinosaurs
- Read books about dinosaurs and other now-extinct animals and how they became extinct
- Talk about the impact of the environment on animals' capacity to remain plentiful
- Read books and talk about species that are endangered and things that could be prevent them from becoming extinct

## STANDARD 4.1: ENVIRONMENT AND ECOLOGY *continued*

<b>4-8 HUMANS AND THE ENVIRONMENT</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Identify types of shelters that humans use</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Name house, trailers, apartments, igloos, tepees or tree houses as types of shelters humans use</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Provide information about types of shelter that are local and those shelters that are unfamiliar</li> <li>Discuss why shelters vary according to where people live</li> </ul>
<b>4-9 ENVIRONMENTAL LAWS AND REGULATIONS</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Discuss rules that protect the environment</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Participate in discussions about the types of things people can do to protect the environment such as disposing of trash and recycling materials</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Facilitate discussions about protecting the environment and the things that children can do to help to protect it</li> </ul>

## SCIENCE AND TECHNOLOGY GLOSSARY

**Construction Technology** – The ways that humans build structures on sites

**Fact** – Information that has been objectively verified

**Hypothesis** – An assertion subject to verification or proof as a premise from which a conclusion is drawn

**Information Technology** – The technical means that humans create to store and transmit information

**Inquiry** – A systematic process for using knowledge and skills to acquire and apply new knowledge

**Law** – Summarizing statement of observed experimental facts that has been tested many times and is generally accepted as true

**Manufacturing Technology** – The ways that humans produce goods and products

**Model** – A description, analogy or a representation of something that helps us understand it better (e.g., a physical model, a conceptual model, a mathematical model)

**Patterns** – Repeated processes that are exhibited in a wide variety of ways; identifiable recurrences of the element and/or the form

**Science** – Search for understanding of the natural world using inquiry and experimentation

**System** – A group of related objects that work together to achieve a desired result

**Transportation Systems** – A group of related parts that function together to perform a major task in any form of transportation

**Transportation Technology** – The physical ways humans move materials, goods and people

**Tool** – Any device used to extend human capability including computer-based tools

## ENVIRONMENT AND ECOLOGY GLOSSARY

**Ecosystem** – A community of living organisms and their interrelated physical and chemical environment

**Endangered species** – A species that is in danger of extinction throughout all or a significant portion of its range

**Environment** – The total of the surroundings (air, water, soil, vegetation, people, wildlife) influencing each living being's existence, including physical, biological and all other factors; the surroundings of a plant or animal, including other plants or animals, climate and location

**Extinction** – The complete elimination of a species from the earth

**Nonrenewable resources** – Substances (e.g., oil, gas, coal, copper, gold) that, once used, cannot be replaced in this geological age

**Recycling** – Collecting and reprocessing a resource or product to make into new products

**Regulation** – A rule or order issued by an executive authority or regulatory agency of a government and having the force of law

**Renewable** – A naturally occurring raw material or form of energy that will be replenished through natural ecological cycles or sound management practices (e.g., the sun, wind, water, trees)

**Wetlands** – Lands where water saturation is the dominant factor determining the nature of the soil development and the plant and animal communities (e.g., sloughs, estuaries, marshes)

# SOCIAL STUDIES THINKING

## CONNECTING TO COMMUNITIES



**T**he foundation of social studies, economics, history and the workings of government begin with children's personal experiences and their initial understanding of themselves in relation to their families, homes and schools. Gradually, students expand their understanding to include communities and the larger world. As their perception grows, they further expand this scope to understand how systems work together. Adults facilitate children's social studies skill development by helping them engage in active investigations that build knowledge and understanding.

### PLAY, PLAY AND PLAY SOME MORE!

**T**he best way to support children's learning in the early years is to provide hands-on, active learning experiences that include play activities. Play enables children to weave together past knowledge and new information in order to acquire new understanding and skill development. A child who discovers the characteristics of apples through manipulating, investigating and exploring them understands the depth of apples better than a child who colors a worksheet picture of an apple. Children who learn together in the dramatic play or block areas how to cooperate in order to figure out how many blocks can be added to a structure before it falls have stronger social and creative thinking sequences. Play sequences and activities expand across all Key Areas of Learning and can build social, cognitive and physical skill development when they are intentionally planned and facilitated by teachers who interact with children, asking open-ended questions to scaffold children's thinking and problem solving.

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## STANDARD 5.1: PRINCIPLES AND DOCUMENTS OF GOVERNMENT

**BIG IDEA:** Good citizens follow rules.

**ESSENTIAL QUESTIONS:** What rules and consequences are important? Can I identify some American symbols?

### 5.1.1 SOURCES, PURPOSE AND FUNCTIONS OF LAW

#### STANDARD STATEMENT

- State rules and some consequences

#### EXEMPLARS (EXAMPLES)

The learner will:

- Tell a friend to stop running
- Explain that you must hold onto the swing so you don't fall

#### SUPPORTIVE PRACTICES

The adult will:

- Discuss rules with children
- Explain purpose of rules (safety, respect)
- Begin to introduce games that have rules
- Read books that support following rules (fiction and non-fiction)
- Create a class rules chart

## STANDARD 5.2: RIGHTS AND RESPONSIBILITIES OF CITIZENSHIP

**BIG IDEA:** Citizenship involves responsibility to myself and others.

**ESSENTIAL QUESTIONS:** Can I describe why I am important in the classroom or my family? Can I identify more than one solution to a problem? How do I show that I can be a leader?

### 5.2.1 CIVIC RIGHTS, RESPONSIBILITIES AND DUTIES

#### STANDARD STATEMENT

- Display awareness of role as a member of a group
- Explain how community workers keep us healthy and safe

#### EXEMPLARS (EXAMPLES)

The learner will:

- Talk about responsibilities at home
- Participate in group decision-making
- Participate in classroom and family responsibilities
- Work cooperatively with other children to achieve an outcome
- Play act fire fighters or doctors

#### SUPPORTIVE PRACTICES

The adult will:

- Talk with children about their family
- Create a class chart listing family members and the job each person does to help the family
- Engage children in class meetings and decision-making
- Give children classroom jobs and responsibilities (feeding fish, hand out paper towels)
- Provide activities that require cooperative play
- Include dress-up clothes and materials to encourage dramatic play that represent community helpers

### 5.2.2 SOURCES AND RESOLUTION OF CONFLICT

#### STANDARD STATEMENT

- Identify one or two solutions to a conflict or a problem
- Attempt to independently solve a conflict with a peer

#### EXEMPLARS (EXAMPLES)

The learner will:

- Tell a friend that an action was inappropriate, such as "you ripped my paper."
- Suggest a solution for a peer who wants the toy that is being used, such as "I'll give it to you in two minutes when I'm finished."
- Work with a peer to develop a solution to a problem, such as ways to share the playdoh when there isn't enough

#### SUPPORTIVE PRACTICES

The adult will:

- Observe and encourage children's attempts to solve their own problems
- Provide feedback on solutions that were attempted
- Provide reinforcement for solutions that are successful
- Hold group meetings to discuss ways to solve classroom problems or conflicts

CONTINUED...

# STANDARD 5.2: RIGHTS AND RESPONSIBILITIES OF CITIZENSHIP

**5.2.3 POLITICAL LEADERSHIP AND PUBLIC SERVICE**

**STANDARD STATEMENT**

- Show interest in leadership opportunities

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Pretend to be the conductor when playing a musical instrument
- Pretend to be the teacher during dramatic play
- Choose a leader for the block building project
- Ask to be line leader
- Request to help teacher, such as telling others that it's clean-up time

**SUPPORTIVE PRACTICES**

**The adult will:**

- Model positive leadership skills
- Provide opportunities for children to make choices
- Provide positive feedback when children assume leadership roles
- Read books about people who are leaders in a variety of ways



# STANDARD 6.1: ECONOMIC SYSTEMS

**BIG IDEA:** People work in our community.

**ESSENTIAL QUESTIONS:** How do I know when things are distributed equally? What are the jobs that people do in the community?

**6.1.2 TRADITIONAL, COMMAND AND MARKET ECONOMIES**

**STANDARD STATEMENT**

- Recognize equal distribution

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- State when someone has more or less
- Attempt to distribute items equally among a group such as snack, materials or toys

**SUPPORTIVE PRACTICES**

**The adult will:**

- Ask open-ended questions about unfair distribution such as one child has more or less
- Assist with equal distribution

**6.1.3 MEASURES OF ECONOMIC**

**STANDARD STATEMENT**

- Demonstrate knowledge about community workers and their roles

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Recognize community workers through their uniforms or equipment
- Describe the work that community workers do
- Describe the jobs people do and how they work together

**SUPPORTIVE PRACTICES**

**The adult will:**

- Invite community helpers into the classroom to talk about their jobs
- Arrange field trips to community service agencies and businesses such as fire house, post office, grocery store, pet store or beauty shop
- Add community worker props to play areas such as uniforms, mailbag, doctor kit or menus
- Read books, both fiction and non-fiction that model people working together

## STANDARD 6.2: MARKETS AND THE FUNCTIONS OF GOVERNMENT

**BIG IDEA:** Money and resources impact our life.

**ESSENTIAL QUESTIONS:** Can I state the names of some coins? Can I use pretend money in play situations? Can I describe where to purchase certain items?

<b>6.2.3 FUNCTION OF MONEY</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Demonstrate an awareness of the uses of money</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Use pretend money while engaging in dramatic play activities</li> <li>Recognize that coins have specific values</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Set up dramatic play opportunities that involve the use of pretend money such as the bank, grocery store or restaurant</li> <li>Use the names of coins and currency and provide an opportunity for children to handle real money</li> <li>Introduce the purpose of a bank, creating opportunities for children to use banking in their classroom experience</li> </ul>
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<b>6.2.5 CHANGES IN SUPPLY AND DEMAND</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Identify where some products originate</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>List items that come from farms or factories</li> <li>Explain that certain businesses such as McDonalds, Burger King and Wendy's make specific products such as hamburgers</li> <li>Practice exchanging play money for goods</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Provide advertisements of businesses in the communities that make specific products</li> <li>Discuss where you would go to buy shoes, to find books or to get a toy</li> </ul>
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## STANDARD 6.3: SCARCITY AND CHOICE

**BIG IDEA:** There is a difference between wants and needs and how we acquire items.

**ESSENTIAL QUESTIONS:** What do I do if I do not have enough of an item?

<b>6.3.1 SCARCITY AND LIMITED RESOURCES</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Understand that some resources and money are limited</li> <li>Notice when materials are gone</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Determine when they need more of something that isn't available, but may be available elsewhere</li> <li>Notice when materials are running low, such as we need more paper in the art area</li> <li>Ask teacher for more milk when the pitcher is empty</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Talk about situations that might occur if materials are limited</li> <li>Discuss how to resolve situations when there are not as many materials as needed</li> <li>Use class meeting times to brainstorm ways for getting more</li> </ul>
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<b>6.3.3 ALLOCATION OF RESOURCES</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Share or offer items to others</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Share or offer own resources when another child needs something</li> <li>Ask another to share a needed item</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Provide enough resources for children working in an area</li> <li>Encourage children to think about how to get more resources if needed</li> <li>Indicate that a resource was empty but now has been replenished</li> </ul>
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# STANDARD 6.5: WORK AND EARNINGS

**BIG IDEA:** People work to earn money.

**ESSENTIAL QUESTIONS:** Can I indicate that adults earn money by working to buy things? Can I name certain businesses? How can I save money?

## 6.5.1 FACTORS INFLUENCING WAGES

### STANDARD STATEMENT

- Understand that one earns money from working

### EXEMPLARS (EXAMPLES)

The learner will:

- Talk about things that have been bought among themselves or with the teacher
- Respond that adults earn money to buy things by working

### SUPPORTIVE PRACTICES

The adult will:

- Reinforce the idea that we work to get money
- Support the idea that money to buy items comes from this work
- Indicate that people do many different kinds of jobs to earn money
- Provide play money in dramatic play area
- Include materials that will encourage business practice experiences as part of the dramatic play area, such as food, a cash register, play money and grocery bags to make a grocery store
- Create a token system where children collect tokens that can be traded in for supplies or trinkets

## 6.5.3 TYPES OF BUSINESSES

### STANDARD STATEMENT

- Name businesses and their corresponding goods and services

### EXEMPLARS (EXAMPLES)

The learner will:

- Participate in role play that is related to a business such as a pet store
- Identify that food is purchased at the grocery store or hair is cut at the beauty salon or barber shop
- Describe where customers go to acquire specific materials, goods or services, such as the stamps are purchased at the post office

### SUPPORTIVE PRACTICES

The adult will:

- Provide materials in the dramatic play area to create many types of businesses
- Read books about businesses both fiction and non-fiction
- Invite a business owner to visit and describe the service or goods that are sold or performed
- Take a walk around the neighborhood to identify the businesses in the community

## 6.5.7 COSTS AND BENEFITS OF SAVING

### STANDARD STATEMENT

- Practice saving money or tokens



### EXEMPLARS (EXAMPLES)

The learner will:

- Talk about saving money in a bank
- Talk about things they might like to buy with saved money
- Use play money to buy things in the dramatic play area
- Collect and save tokens for an anticipated "purchase"
- Trade in tokens for a desired prize

### SUPPORTIVE PRACTICES

The adult will:

- Encourage saving money in a bank or other safe place
- Talk about the benefits of saving money to buy special things
- Develop situations where children can earn and save tokens, then use them to "purchase" a desired item
- Include play money in classroom learning areas, such as the dramatic play area or block corner

# STANDARD 7.1: BASIC GEOGRAPHIC LITERACY

**BIG IDEA:** Each individual is a member of a larger community.

**ESSENTIAL QUESTIONS:** How do I use or create a simple map? Can I describe basic features of places I've visited?

**7.1.1 GEOGRAPHIC TOOLS**

**STANDARD STATEMENT**

- Demonstrate a beginning understanding of maps as actual representations of places

**EXEMPLARS (EXAMPLES)**

The learner will:

- Use a simple map
- Use blocks to represent buildings, roads or houses
- Include representations of roads, bodies of water and buildings in play

**SUPPORTIVE PRACTICES**

The adult will:

- Display maps and globes and pictures of construction sites
- Talk about how to get from one place to another

**7.1.2 PLACES AND REGIONS**

**STANDARD STATEMENT**

- Describe the characteristics of his/her home and frequently visited locations



**EXEMPLARS (EXAMPLES)**

The learner will:

- Give information about the place she/he lives such as address and phone number
- Identify and locate familiar places in the neighborhood
- Describe if dwelling is apartment, house, mobile home
- State information about the park, playground or other friends' homes
- List the kinds of furniture that belong in specific rooms, such as bed in bedroom and stove in kitchen
- Describe simple characteristics of a business or community structure, such as the store with the big windows or the house that has the flag out front

**SUPPORTIVE PRACTICES**

The adult will:

- Practice address recognition with children
- Compare types of homes
- Talk about favorite places to visit
- Create a class bulletin board with favorite places listed

# STANDARD 7.2: PHYSICAL CHARACTERISTICS OF PLACES AND REGIONS

**BIG IDEA:** Every location can be described by its physical characteristics.

**ESSENTIAL QUESTIONS:** How do I describe the location of objects to others?

**7.2.1 PHYSICAL CHARACTERISTICS**

**STANDARD STATEMENT**

- Describe the location of items/areas in the classroom and areas at home

**EXEMPLARS (EXAMPLES)**

The learner will:

- Use directionality, size and position such as left, right, first, last, little, big, top, bottom to describe location in the classroom
- Place pictures of common household items in the proper rooms of a house floor plan
- Listen to directions and retrieve items

**SUPPORTIVE PRACTICES**

The adult will:

- Encourage children to move in various ways, including climbing, jumping and rolling so they experience position in space
- Point out where things are located
- Use left and right and other directional terms

## STANDARD 7.3: HUMAN CHARACTERISTICS OF PLACES AND REGIONS

**BIG IDEA:** All humans have similarities and differences.

**ESSENTIAL QUESTIONS:** How do I respect and appreciate others' differences?

### 7.3.1 HUMAN CHARACTERISTICS

#### STANDARD STATEMENT

- Identify some similarities and differences of physical and personal characteristics
- Demonstrate an appreciation of one's own characteristics and those of others and others' cultures

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Make self-portraits that include body parts and clothing
- Demonstrate an appreciation of one's own characteristics and those of others
- Show understanding and respect for diverse customs and practices
- Share information about family customs

#### SUPPORTIVE PRACTICES

##### The adult will:

- Provide skin tone crayons and markers for children to use
- Discuss similarities and differences in dress, customs, tools and transportation as seen in books, movies, and pictures
- Include multicultural materials throughout the classroom, including books, dolls, dress-up materials and props, art materials, posters

## STANDARD 7.4: INTERACTIONS BETWEEN PEOPLE AND THE ENVIRONMENT

**BIG IDEA:** People and the environment affect each other.

**ESSENTIAL QUESTIONS:** How do I make changes based on what is occurring in the environment? How do I use basic technology?

### 7.4.1 IMPACT OF PHYSICAL SYSTEMS ON PEOPLE

#### STANDARD STATEMENT

- Recognize that environmental changes can impact what people do

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Describe types of clothing to wear in specific weather
- Note if children can play outdoors based on the weather
- Share information about roadwork noticed on the way to school
- Discuss reasons for not picking flowers on the way to school
- Assist with classroom jobs
- Help to clean up outside the classroom

#### SUPPORTIVE PRACTICES

##### The adult will:

- Discuss the impact of the weather on the day's activities
- Provide seasonal clothing and props in the dramatic play area
- Provide opportunities for children to dress a weather character with appropriate clothing
- Talk about changes occurring near or around the school
- Discuss and reinforce how to maintain the indoor and outdoor environment

### 7.4.2 IMPACT OF PEOPLE ON PHYSICAL SYSTEMS

#### STANDARD STATEMENT

- Understand how to make simple technology work

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Turn a tape recorder or CD player on or off
- Independently operate computer game
- Explore multimedia effects on the computer
- Look at X-rays in the dramatic play area

#### SUPPORTIVE PRACTICES

##### The adult will:

- Provide a green sticker on the play button and a red sticker on the stop button on tape or CD player
- Provide a variety of age appropriate computer games
- Provide X-rays in the dramatic play area
- Provide supervision when children are using devices
- Put non-working devices in play areas, including objects that can be taken apart and put back together

# STANDARD 8.1: HISTORICAL ANALYSIS AND SKILLS DEVELOPMENT

**BIG IDEA:** Past and present experiences and ideas help us make sense of the world.

**ESSENTIAL QUESTIONS:** How can I sequence events? Can I recall things that have occurred? Can I get information about a topic from several sources?

## 8.1.1 CONTINUITY AND CHANGE OVER TIME

### STANDARD STATEMENT

- Demonstrate understanding of a sequence of events
- Use words to describe time (yesterday, today, tomorrow)

### EXEMPLARS (EXAMPLES)

The learner will:

- Put pictures from a story in sequential order
- Show anticipation for regularly scheduled events
- Describe a daily routine
- Describe what happens next in a familiar story

### SUPPORTIVE PRACTICES

The adult will:

- Talk about what is happening during the day and the week
- Use the names of the days of the week
- Establish and maintain a consistent routine
- Ask children to recall what happened last night or yesterday
- Use calendars to talk about what happened in the past and what will happen in the future
- Read familiar story and pause so children can say what might happen next

## 8.1.2 HISTORICAL COMPREHENSION AND INTERPRETATION

### STANDARD STATEMENT

- Understand how things, people and places change over time



### EXEMPLARS (EXAMPLES)

The learner will:

- Recall information from the immediate past
- Predict how events today or in the recent past affect the near future such as “We had crackers for snack yesterday, so we’ll have pretzels today”
- Attempt to use terms like yesterday, tomorrow, last night correctly
- Sequence pictures of self from birth to present

### SUPPORTIVE PRACTICES

The adult will:

- Provide access to clocks, timers and watches
- Discuss what happens in the beginning, middle and end of stories
- Label events and routines using language such as today, tomorrow, next, later, long ago
- Include materials (dinosaurs and robots) from the past and future for play and discussion
- Invite grandparents to talk about their experiences
- Display pictures and books that show children in different stages of growth

## 8.1.3 RESEARCH

### STANDARD STATEMENT

- Understand that information comes from many sources, such as books, computer, or newspapers

### EXEMPLARS (EXAMPLES)

The learner will:

- Look at books, pictures and authentic items related to a topic to gather information
- Watch a movie on a topic
- Play act looking up a phone number in a directory or a recipe in a cookbook

### SUPPORTIVE PRACTICES

The adult will:

- Provide books, pictures and authentic objects on a theme
- Model going to the library to get information about a question
- Provide multimedia information about a theme
- Talk about the resources you use for specific information such as a cookbook or a map
- Model researching to answer a question by looking it up on the computer or in a book
- Include topical books in multiple learning areas for children’s access

# SOCIAL STUDIES THINKING GLOSSARY

## CIVICS AND GOVERNMENT

**Authority** – Right to control or direct the actions of others, legitimized by law, morality, custom or consent

**Citizen** – Member of a political society who therefore owes allegiance to and is entitled to protection by and from the government

**Community** – A group of people who share a common social, historical, regional or cultural heritage

**Conflict Resolution** – The process of attempting to solve a dispute or conflict

**Country** – The acceptable political boundaries or borders recognized throughout the world

**Decision-making Process** – An organized approach to making choices

**Government** – Institutions and procedures through which a territory and its people are ruled

**Leadership** – State or condition of one who guides or governs

**State** – A commonwealth; a nation; a civil power

## ECONOMICS

**Community Helpers** – Any group or individual who plays a role in the community such as doctors, nurses, dentists, teachers, parents, firemen, policemen, trash collectors, animal control officers

**Competition** – The rivalry among people and/or business firms for resources and/or consumers

**Consumer** – One who buys or rents goods or services and uses them

**Cost** – What is given up when a choice is made; monetary and/or non monetary

**Demand** – The different quantities of a resource, good or service that potential buyers are willing and able to purchase at various prices during a specific time period

**Goods** – Objects that can satisfy people's wants

**Household** – The group of people living together under one roof; a group of individuals whose economic decision-making is interrelated

**Money** – A medium of exchange

**Natural Resource** – Anything found in nature that can be used to produce a product (e.g., land, water, coal)

**Price** – The amount people pay in exchange for a particular good or service

**Producer** – One who makes goods or services

**Profit** – Total revenue minus total costs

**Services** – Actions that are valued by others

**Supply** – The different quantities of a resource, good or service that potential sellers are willing and able to sell at various prices during a specific time period

**Wants** – Desires that can be satisfied by consuming goods, services or leisure activities

## GEOGRAPHY

**Climate** – Long-term patterns and trends in weather elements and atmospheric conditions

**Culture** – The way of life of a group of people, including customs, beliefs, arts, institutions and worldview. Culture is acquired through many means and is always changing

**Environment** – Everything in and on earth's surface and its atmosphere within which organisms, communities, or objects exist.

**Geographic Tools** – Tools used by geographers to organize and interpret information. Tools range from the very simple (maps and globes) to the complex (Geographic Information Systems, population pyramids, satellite images, and climate graphs)

**Place** – An area with distinctive human and physical characteristics; these characteristics give it meaning and character and distinguish it from other areas

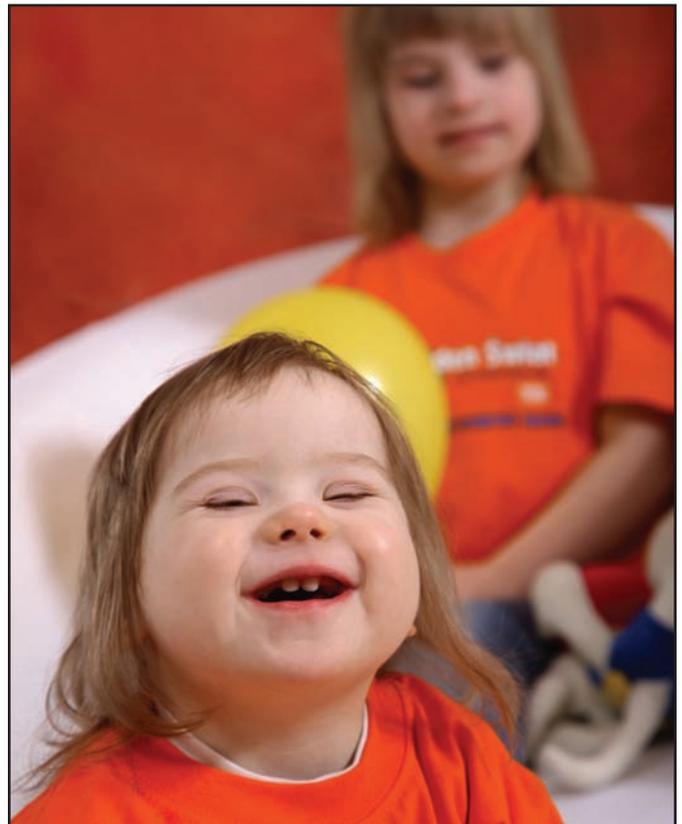
**Resource** – An aspect of the physical environment that people value and use to meet a need for fuel, food, industrial product, or something else of value

## HISTORY

**Conflict** – The opposition of persons or groups that gives rise to dramatic action. Such actions could include the use of force as in combat.

**Document** – A formal piece of writing that provides information or acts as a record of events or arrangements

**Media Sources** – Various forms of mass communication such as television, radio, magazines, newspapers and internet



# HEALTH, WELLNESS AND PHYSICAL DEVELOPMENT

## LEARNING ABOUT MY BODY



**C**hildren’s future health and well-being are directly related to the development and strengthening of their gross and fine motor muscles. Children must have opportunities to experience active indoor and outdoor play in which they can use their bodies to explore the environment while acquiring muscle control, balance, coordination, strength, eye-hand coordination and other related skills. Health and safety activities must be integrated throughout the day as teachers model healthy and safe practices and promote healthy lifestyles for children.

### GET UP AND MOVE!



Obesity is a growing concern even for very young children. Research indicates that even young toddlers are eating inappropriate foods with too many calories. Early childhood programs have a unique opportunity to influence children’s healthy eating and physical activity habits. Teachers need to plan adequate opportunities for children to exercise and engage in outdoor play, weather permitting. Including active movement games and songs as part of the indoor routine can also extend the amount of time children are exercising each day. Providers must carefully plan menus that offer healthy foods and limit snacks and extras, like dessert, to nutritionally-appropriate selections. Teachers who work with their program administrators and their families to introduce and sustain good healthy choices and habits influence children’s ongoing development and school success.



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**STANDARD 10.1-3: HEALTH AND SAFE PRACTICES**

**THIS STANDARD HAS BEEN COMBINED AND ALIGNED TO THE GRADES 3-12 STANDARDS 10.1, 10.2 AND 10.3.**

**BIG IDEA:** Children need to make healthy choices, physically and nutritionally, to optimize their learning potential.

**ESSENTIAL QUESTIONS:** What are things I can do to keep myself healthy and safe? Can I identify ways to help my body develop? What are some healthy foods?

**10.1 3.1 FUNDAMENTALS OF GOOD HEALTH**

**STANDARD STATEMENT**

- Practice basic hygiene routines with adult reminders
- Identify medicine and know that it is used to stay healthy
- Identify fundamental practices for good health
- Identify how people keep us healthy

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Wash own hands, brush teeth, cover nose and mouth when sneezing, wash hands after using tissue
- Discuss what medicine is used for
- Discuss times medicine might be needed
- Explain that we need to eat well, get rest and exercise to be healthy
- Explain how a doctor, nurse or dentist can keep us healthy

**SUPPORTIVE PRACTICES**

**The adult will:**

- Provide opportunities in daily schedule to practice hygiene routines (tooth brushing, flossing teeth)
- Create learning centers that support healthy practices
- Provide opportunities for children to discuss what happens when we are sick and what we do to feel better
- Discuss the positive and negative points of medication
- Remind children to only take medicine from a trusted adult
- Provide examples of healthy meals
- Display the food pyramid
- Encourage children to rest to help their bodies stay healthy
- Model and encourage exercise and active play
- Read books about staying healthy

**10.1 3.2 BODY AWARENESS**

**STANDARD STATEMENT**

- Identify and locate body parts
- Identify specific practices that support body development and function

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Name and point to body parts when asked
- Discuss what is meant by feeling healthy
- Identify rest, exercise and good eating as ways to stay healthy
- Participate in body part identification games and songs such as Hokey Pokey or Where is Thumbkin?

**SUPPORTIVE PRACTICES**

**The adult will:**

- Provide play opportunities to point to and name different body parts on dolls and child
- Provide dolls and puzzles with body parts
- Make outlines of body and add body parts such as facial features and fingernails
- Read books about healthy practices and images
- Discuss the concepts of rest, exercise and good eating related to good health
- Encourage children to engage in healthy practices

**CONTINUED...**

**STANDARD 10.1-3: HEALTH AND SAFE PRACTICES** continued

**10.1 3.3 SAFE PRACTICES**

**STANDARD STATEMENT**

- Identify and follow basic safety rules
- Identify how people help to keep us safe
- Identify the consequence of unsafe behavior

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Identify potential hazards at home, school, and community
- Identify and avoid unsafe practices, such as playing with matches, crossing streets and talking to strangers
- Identify and use playground and classroom rules
- Identify emergency procedures
- Explain how a firefighter and police officer can keep us safe
- Explain what could happen if unsafe behavior occurs

**SUPPORTIVE PRACTICES**

**The adult will:**

- Talk with children about harmful substances and objects, discuss and practice crossing street
- Practice making “911” calls
- Model and positively guide playground and classroom rules
- Demonstrate and practice “STOP DROP ROLL” and emergency procedures
- Practice fire and emergency evacuation procedures
- Use sunscreen
- Provide safety worker props for dramatic play area
- Read books about safety
- Invite safety workers to visit class
- Include nontraditional roles using display, pictures, puppets, dolls
- Discuss consequences of unsafe behavior such as injury or damage to property



**10.1 3.4 NUTRITION**

**STANDARD STATEMENT**

- Name foods that keep us healthy
- Classify foods by their food group

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Make healthy food choices
- Identify healthy and not healthy foods
- Match foods to others in a similar category such as fruit, vegetable, milk or grain

**SUPPORTIVE PRACTICES**

**The adult will:**

- Provide a variety of healthy choices at snack or meal time
- Create a healthy/not healthy picture sort game
- Discuss the importance of making healthy choices
- Model healthy eating
- Display the food pyramid
- Provide a variety of foods and pictures including ethnic foods such as tortillas, lasagna, black-eyed peas, bagels or chili for children to classify

## STANDARD 10.4: PHYSICAL ACTIVITY: GROSS MOTOR COORDINATION

**BIG IDEA:** Children gain control over their bodies and body movements through active experiences and exploration.

**ESSENTIAL QUESTIONS:** Do I participate in large motor activities and games? Am I able to comfortably use large motor equipment?

### 10.4.1 CONTROL AND COORDINATION

#### STANDARD STATEMENT

- Combine large motor movements with the use of equipment
- Demonstrate coordination of body movements in active play
- Move and stop with control
- Perform a variety of movement skills along side and with a partner

#### EXEMPLARS (EXAMPLES)

The learner will:

- Throw a bean bag or ball overhand with aim
- Catch a ball
- Pull wagons or push wheelbarrows
- Ride a tricycle, using feet to pedal
- Use outdoor gross motor equipment such as swings, climbers and tunnels safely and appropriately
- Run with control and direction
- Stop when intended
- Engage in games like Hokey Pokey, London Bridge or Simon Says

#### SUPPORTIVE PRACTICES

The adult will:

- Play catch with children
- Provide light balls that easily fit in a hand. Encourage child to throw with one hand while stepping forward
- Provide targets for children to throw toward such as hula hoops or baskets
- Include toys and equipment that encourage active play such as three and four wheeled steerable vehicles, balls, climbers and slides, balance beams, ramps
- Provide areas on the playground for riding toys to be used safely
- Ensure riders wear helmets
- Provide outside time for children to run
- Create opportunities for children to participate in large motor movement games that involve partners

### 10.4.3 BALANCE AND STRENGTH

#### STANDARD STATEMENT:

- Exhibit balance while moving on large motor equipment
- Show enthusiasm for mastery of gross motor movements through repetitive practice

#### EXEMPLARS (EXAMPLES)

The learner will:

- Engage in large motor activities such as marching, hopping, running, jumping and dancing
- Walk on a balance beam
- Climb stairs using alternating feet
- Jump over an object with both feet
- Walk on tip toe for a short distance
- Participate in an obstacle course going through tunnels, over or under equipment
- Participate in movement games
- Climb a short ladder on a slide
- Kick a ball

#### SUPPORTIVE PRACTICES

The adult will:

- Provide space and opportunities for children to walk, run and climb every day
- Provide opportunities for children to engage in gross motor activities inside such as dancing and moving to music, bean bag toss, or Velcro mitts
- Include large motor activities during transitional times such as hop to the table, jump five times while you wait to wash your hands
- Include motor games and songs such as Skip to my Lou and The Farmer in the Dell
- Create obstacle courses to practice gross motor movements

## STANDARD 10.5: CONCEPTS, PRINCIPLES AND STRATEGIES OF MOVEMENT: FINE MOTOR DEVELOPMENT

**BIG IDEA:** Fine motor practice helps children develop eye–hand coordination, strength and controlled use of tools.

**ESSENTIAL QUESTIONS:** Can I perform simple finger plays? How do I use my hands and fingers to manipulate objects? How do I develop hand–eye coordination?

### 10.5.1 STRENGTH, COORDINATION AND MUSCLE CONTROL

#### STANDARD STATEMENT

- Use hands, fingers and wrists to manipulate objects
- Practice manual self help skills

#### EXEMPLARS (EXAMPLES)

The learner will:

- Manipulate dough and clay by squeezing, pounding, rolling
- Tear paper with purpose
- Use scissors to cut
- Use tongs or tweezers to pick up objects
- Manipulate pegs into a pegboard
- String beads, noodles, or cereal onto a string
- Play with pop beads and snap cubes
- Zip zippers
- Snap, button and Velcro clothes
- Practice tying
- Act out finger plays and songs using hands and fingers
- Complete wooden and cardboard shape and frame puzzles

#### SUPPORTIVE PRACTICES

The adult will:

- Provide opportunities and materials to play with playdough
- Provide opportunities to use scissors
- Provide pegs and peg boards
- Provide a variety of objects for stringing
- Supply tweezers and tongs to grasp objects.
- Provide a wide variety of beads and snap cubes for children to put together and pull apart
- Encourage children to attempt to use closures
- Encourage and practice shoe tying
- Teach and participate in finger plays
- Provide a variety of puzzles

### 10.5.2 EYE/HAND COORDINATION

#### STANDARD STATEMENT

- Coordinate eye and hand movements to perform a task

#### EXEMPLARS (EXAMPLES)

The learner will:

- Act out finger plays with hands and fingers
- Complete self–help skills such as zip, snap or button
- String beads, manipulate pegs, build with small blocks
- Use tools to pour, such as funnels, basters, and pitchers
- Put together puzzles

#### SUPPORTIVE PRACTICES

The adult will:

- Provide small toys that need to be put together, such as snap beads or lacing beads
- Include puzzles of varying levels of difficulty for children to put together
- Develop activities or opportunities for children to practice drawing and writing with a variety of tools
- Encourage children to practice their own self help skills such as zipping
- Provide opportunities for children to pour water or milk and to serve their own foods such as spooning out applesauce

### 10.5.3 USE OF TOOLS

#### STANDARD STATEMENT

- Use writing and drawing implements with correct grip to make pictures
- Use classroom and household tools independently to accomplish a purpose

#### EXEMPLARS (EXAMPLES)

The learner will:

- Hold pencils, crayons, and markers in a functional grasp (pincer grasp)
- Use glue sticks to paste various items
- Use paint brushes to make strokes at the easel
- Use appropriate tools to complete classroom jobs
- Use fork and spoon appropriately
- Use cup or glass for drinking

#### SUPPORTIVE PRACTICES

The adult will:

- Encourage children to use pencil sharpener, chalkboard erasers and watering can to complete classroom jobs
- Provide both forks and spoons for children to use when eating

## HEALTH, WELLNESS & PHYSICAL DEVELOPMENT GLOSSARY

**Agility** – A component of physical fitness that relates to the ability to rapidly change the position of the entire body in space with speed and accuracy

**Balance** – A skill-related component of physical fitness that relates to the maintenance of equilibrium while stationary or moving

**Coordination** – A skill-related component of physical fitness that relates to the ability to use the senses together with body parts in performing motor tasks smoothly and accurately

**Developmental Differences** – Learners are at different levels in their motor, cognitive, emotional, social and physical development. The learners' developmental status will affect their ability to learn or improve

**Developmentally appropriate** – Motor skill development and change that occur in an orderly, sequential fashion and are age and experience related

**Directions** – Forward, backward, left, right, up, down

**Flexibility** – A health-related component of physical fitness that relates to the range of motion available at a joint

**Food Guide Pyramid** – A visual tool used to help people plan healthy diets according to the Dietary Guidelines for America

**Health** – A state of complete physical, mental and social well-being; not merely the absence of disease and infirmity



**Health Education** – Planned, sequential PK-12 program of curricula and instruction that helps students develop knowledge, attitudes and skills related to the physical, mental, emotional and social dimensions of health

**Locomotor Movement** – Movements producing physical displacement of the body, usually identified by weight transference via the feet. Basic locomotor steps are the walk, run, hop and jump as well as the irregular rhythmic combinations of the skip, slide and gallop

**Motor Skills** – Non-fitness abilities that improve with practice and relate to one's ability to perform specific sports and other motor tasks (tennis serve, shooting a basketball)

**Movement Skills** – Proficiency in performing nonlocomotor, locomotor and manipulative movements that are the foundation for participation in physical activities

**Nonlocomotor Movement** – Movements that do not produce physical displacement of the body

**Physical Activity** – Bodily movement that is produced by the contraction of skeletal muscle and which substantially increases energy expenditure

**Physical Education** – Planned, sequential, movement-based program of curricula and instruction that helps students develop knowledge, attitudes, motor skills, self-management skills and confidence needed to adapt and maintain a physically active life

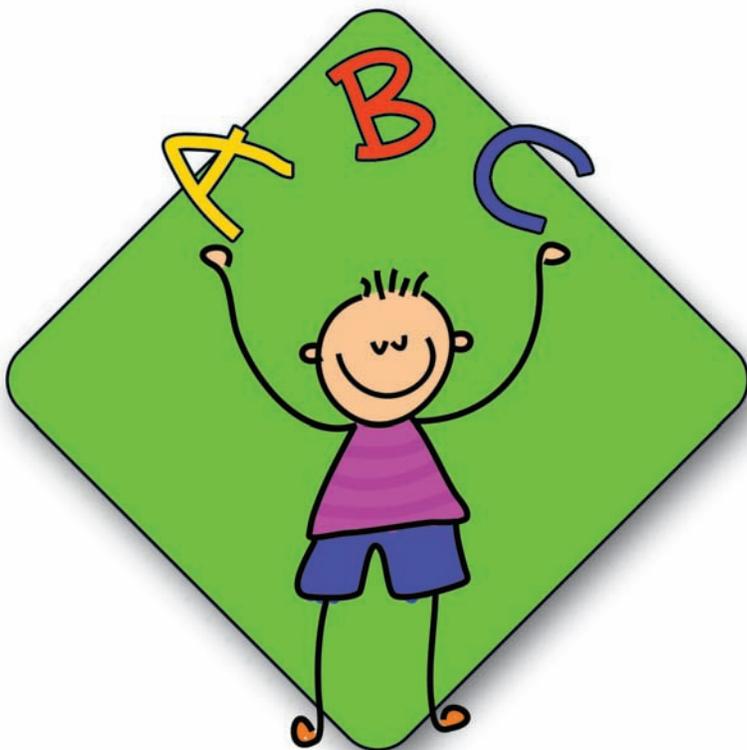
**Physical Fitness** – A set of attributes that people have or achieve that related to their ability to perform physical activity

**Safety Education** – Planned, sequential program of curricula and instruction that helps students develop the knowledge, attitudes and confidence needed to protect them from injury



# LANGUAGE AND LITERACY DEVELOPMENT

## EARLY LITERACY FOUNDATIONS; READING, WRITING, SPEAKING AND LISTENING



**C**ommunication occurs in different ways. It is a way to share one's ideas and understand the ideas of others. Reading involves the use of pictures, symbols and text to gain information and derive meaning, and writing is used for a variety of purposes. Children should be exposed to a variety of books to acquire new information and for personal fulfillment. Children apply a wide range of strategies to comprehend, interpret, evaluate and appreciate text. Children draw meaning from their prior knowledge and experience, their interactions with others, their knowledge of word meaning and their word identification strategies. Children vary their use of the spoken and written language to communicate effectively with others. One of the first building blocks of reading is phonemic awareness; this is one of the best predictors of early reading achievement. Children should be developing this awareness in the early years by listening to rhyming stories and songs and engaging in word play activities.

### INCLUSIVE CLASSROOMS

**E**arly childhood classrooms should be inclusive ones where children with disabilities and developmental delays are enjoying classroom experiences alongside their typically developing peers. Teachers, specialists, and families must work together to understand all children's unique needs while adapting teaching strategies, materials and/or environment to assure that every child can learn and develop to his/her highest potential. Adults must celebrate all children's accomplishments and appreciate what children can learn and do.

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# STANDARD 1.1: LEARNING TO READ INDEPENDENTLY

**BIG IDEA:** Emerging reading involves the use of pictures, symbols and text to gain information and derive meaning.

**ESSENTIAL QUESTIONS:** How do I practice pre-reading skills? How do I understand information and details from a variety of books?

**1.1.1 PURPOSES FOR READING**

**STANDARD STATEMENT**

- Use a variety of text during play
- Select a variety of genre during play

**EXEMPLARS (EXAMPLES)**

The learner will:

- Choose books from classroom library to peruse
- Identify environmental print
- Pretend to read by moving eyes and /or pointing with finger from left to right, top to bottom, front to back
- Use print materials in learning centers, such as cookbooks, menus, phone books or maps

**SUPPORTIVE PRACTICES**

The adult will:

- Provide purposeful and playful exposure to a variety of printed materials
- Use printed material for functional purposes
- Model and explicitly demonstrate to read print top to bottom and left to right
- Provide opportunities for learners to practice to read print top to bottom and left to right
- Read and re-read quality literature daily
- Provide learning centers and a classroom library where learners can independently interact with quality books

**1.1.2 WORD RECOGNITION SKILLS**

**STANDARD STATEMENT**

- Identify upper case letters
- Associate some names of letters with their shapes and sounds
- Differentiate words and letters
- Continue teacher-initiated word patterns
- Identify familiar words and environmental print



**EXEMPLARS (EXAMPLES)**

The learner will:

- Name upper case letters
- Begin to differentiate between and among letters, numbers, words, sentences
- Recognize that one child's name begins with the same sound as another child's name
- Recognize when two or more words begin with the same sound
- Create two words, a phrase or short sentence with words that begin with the same sound
- Read familiar names and words in the environment

**SUPPORTIVE PRACTICES**

The adult will:

- Provide opportunities for children to experiment and play with the sounds that words make through rhymes, nonsense words, poems, music and chants
- Provide opportunities to clap out the syllables of names or words
- Read books that contain rich language (rhyme, repetition and rhythm)
- Provide rich environmental print in classroom (posters, charts, word walls)
- Play rhyming and sound games
- Provide opportunities for children to hear and identify rhyming words and alliteration of beginning sounds
- Provide opportunities in group and centers for identifying letters, words, numbers, sentences
- Provide materials for exploration of letters and sounds

**1.1.3 VOCABULARY DEVELOPMENT**

**STANDARD STATEMENT**

- Describe pictures in books using detail
- Practice new vocabulary with teacher assistance
- Match vocabulary to picture clues
- Use new vocabulary when speaking

**EXEMPLARS (EXAMPLES)**

The learner will:

- Talk about pictures using many details
- Match pictures with new vocabulary words
- Use new vocabulary in the context of dramatic play, daily routines and classroom conversations
- Begin to use new vocabulary when asking questions or describing situations or objects

**SUPPORTIVE PRACTICES**

The adult will:

- Encourage children to use new vocabulary words when discussing pictures or real objects
- Provide learning centers for children to engage with words and pictures
- Support and praise children's use of new words
- Introduce vocabulary in the context of topics when using books, fingerplays or songs, poems

CONTINUED...

## STANDARD 1.1: LEARNING TO READ INDEPENDENTLY *continued*

### 1.1.4 COMPREHENSION AND INTERPRETATION

#### STANDARD STATEMENT

- Respond appropriately to directions and stories
- Use verbs to describe illustrations showing action
- Retell a simple story in sequence with picture support
- Identify story details through questioning
- Draw connections between story events and personal experiences

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Demonstrate understanding of directions and stories by appropriate responses
- Attach action words to illustrations showing action, such as “That girl in the picture is running fast.”
- Retell a story in sequential order using various materials
- Answer questions about stories
- Use prior knowledge to draw connections between events of story and self

#### SUPPORTIVE PRACTICES

##### The adult will:

- Reinforce appropriate responses to directions or stories
- Provide purposeful and playful exposure to a variety of printed materials
- Read rich literature ( stories/books, poems) daily and model making connections between story events and background knowledge
- Provide opportunities to practice sequencing using pictures and flannel boards
- Model attaching nouns and verbs to illustrations on a regular basis

### 1.1.5 FLUENCY

#### STANDARD STATEMENT

- Recite rhymes, songs, and familiar text while using tracking
- Apply knowledge of letters, words, and sounds to read simple sentences



#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Say or sing nursery rhymes
- Read chants, poems daily using pointers or finger to track print
- Assemble words to form sentences and share with classmates

#### SUPPORTIVE PRACTICES

##### The adult will:

- Provide charts and morning messages for children to read independently
- Promote reading the room strategy, such as searching for environmental print
- Expose learners to poems, chants, finger-plays, and songs that include rhyme, rhythm and repetition
- Create learning centers that focus on letters, sounds, words and creating simple sentences

## STANDARD 1.2: READING, ANALYZING AND INTERPRETING TEXT

**BIG IDEA:** Children understand and respond to a wide variety of text.

**ESSENTIAL QUESTIONS:** How do I identify parts of books? How do I show print awareness? Can I make and confirm predictions about text?

### 1.2.1 TEXT ANALYSIS AND EVALUATION

#### STANDARD STATEMENT

- Identify title and author of story
- Identify characters in story
- Discuss events in book or story
- Explain reasons for liking or disliking a book or story with prompting

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Tell the name of a book and author when asked
- Name characters in a story
- Talk about events that happened within a story
- Tell why a book is liked or disliked

#### SUPPORTIVE PRACTICES

##### The adult will:

- Point out title, author and illustrator when reading
- Discuss characters and story events after reading
- Graph likes and dislikes
- Encourage children to explain why they like or dislike a book

CONTINUED...

## STANDARD 1.2: READING, ANALYZING AND INTERPRETING TEXT cont.

### 1.2.2 TEXT ORGANIZATION

#### STANDARD STATEMENT

- Practice book handling skills
- Identify beginning and end of a story
- Practice tracking from top to bottom and left to right with scaffolding

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Orient a book correctly
- Turn pages in order
- Tell what happens at the beginning and end of the story
- Use pointers or finger to track print on charts, posters, environmental print or in books

#### SUPPORTIVE PRACTICES

##### The adult will:

- Model correct book orientation
- Model turning pages carefully and in order
- Ask about the beginning and end of the story
- Provide pointers and charts for children to practice tracking
- Reinforce children moving from top to bottom and left to right

### 1.2.3 FACT AND OPINION

#### STANDARD STATEMENT

- Differentiate between real and make-believe
- State at least one important fact from informational text

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Tell what could or could not happen in a story
- Identify real or make believe characters
- Tell one thing learned from a non-fiction text

#### SUPPORTIVE PRACTICES

##### The adult will:

- Ask children to talk about what could really happen, such as “Do you think pigs can really fly?”
- Verify children’s responses about real and make believe characters
- Read non-fiction texts to children
- Encourage children to use non-fiction to find out information
- Ask children to identify facts from text



### 1.2.5 INFERENCES

#### STANDARD STATEMENT

- Use illustration clues and story sequence to infer and predict what happens next in a story
- Decide if predictions were confirmed

#### EXEMPLARS (EXAMPLES)

##### The learner will:

- Make predictions before a story or during a story
- Determine if the prediction was correct after reading

#### SUPPORTIVE PRACTICES

##### The adult will:

- Encourage children to make predictions before and during story reading
- Use the story to confirm predictions

## STANDARD 1.3: READING, ANALYZING AND INTERPRETING LITERATURE

**BIG IDEA:** Literature consists of a variety of elements to convey meaning.

**ESSENTIAL QUESTIONS:** How do I recognize the different elements in a story? How do I respond to questions about the story?

<b>1.3.1 ANALYSIS AND EVALUATION</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Select favorite book from many by same author</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Listen to many books by the same author and determine favorite</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Use author studies to read many books by the same author</li> <li>Ask children to choose favorite book</li> <li>Graph results</li> </ul>
<b>1.3.2 LITERARY GENRES</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Identify a variety of literary genre with teacher support</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Tell if a book or reading selection is a fairy tale, poetry, fiction or non-fiction</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Discuss genres when reading</li> <li>Make a chart of books that fit into each category</li> <li>Ask children to name genre</li> </ul>
<b>1.3.3 LITERARY ELEMENTS</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Respond to questions about main characters, setting and events during a read aloud</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Answer who, how, when and where questions</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Ask questions during and after reading that focus on character, setting and events</li> </ul>
<b>1.3.4 LITERARY DEVICES</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Recognize rhyming words in works of literature with teacher support</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Identify rhyming words in a story when asked by the teacher</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Point out rhyming words and patterns in books</li> </ul>

## STANDARD 1.4: TYPES OF WRITING

**BIG IDEA:** Children write for different purposes and audiences.

**ESSENTIAL QUESTIONS:** How do I share information through writing? How do I describe my writing?

<b>1.4.1 NARRATIVE</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Create illustration and write about it</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Draw a picture and write symbols or words that tell about it</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Encourage children to write symbols or words that describe their pictures</li> <li>Use journals pages where children can write about stories or events in their day</li> </ul>
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## STANDARD 1.4: TYPES OF WRITING *continued*

<b>1.4.2 INFORMATIONAL</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Share information through pictures and dictated words</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Create a picture about a nonfiction topic and talk about it with the teacher</li> <li>Share information from various sources about non-fiction topics</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Write the child's words on the picture</li> <li>Display in the classroom</li> <li>Create charts of children's ideas about topics</li> <li>Display informational text in various locations in the room, such as on posters or bulletin boards, in stories and books or in learning areas</li> </ul>
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## STANDARD 1.5: QUALITY OF WRITING

**BIG IDEA:** Writing conveys the author's ideas about a topic.

**ESSENTIAL QUESTIONS:** How do I choose the key ideas of a topic about which to write? How do I practice writing symbols and words?

<b>1.5.1 FOCUS</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Illustrate and /or tell about a specific topic</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Create a picture that is related to a topic and talk about it</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Talk about the focus of books and pictures that children see</li> </ul>
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<b>1.5.2 CONTENT</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Generate ideas for a picture, story or shared writing</li> <li>Identify and/or create illustrations that depict story detail</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Brainstorm ideas for pictures and stories</li> <li>Create pictures that represent details in the story</li> <li>Tell teacher what she/he will draw when asked</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Create a list of ideas brainstormed by the children</li> <li>Ask children to explain the pictures drawn to represent a story</li> </ul>
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<b>1.5.3 ORGANIZATION</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Write symbols, words or simple phrases that communicate an idea</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Work with teacher to create words or sentences that relate to one topic</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Provide materials and opportunities for children to write daily</li> <li>Allow children to create written work of their choice</li> </ul>
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<b>1.5.6 CONVENTION</b>	<p><b>STANDARD STATEMENT</b></p> <ul style="list-style-type: none"> <li>Experiment with a variety of writing tools and surfaces</li> <li>Create letter forms using various materials</li> <li>Print letters in name using letter-like forms or conventional print</li> </ul>	<p><b>EXEMPLARS (EXAMPLES)</b></p> <p>The learner will:</p> <ul style="list-style-type: none"> <li>Use markers, paints, crayons, chalk and chalkboard to communicate</li> <li>Use pipe cleaners, playdoh, foam, tooth-picks and other materials to create letters and letter forms</li> <li>Write name using letter-like forms or even conventional print</li> </ul>	<p><b>SUPPORTIVE PRACTICES</b></p> <p>The adult will:</p> <ul style="list-style-type: none"> <li>Provide a variety of materials in the writing center for children to communicate or create</li> <li>Post children's names on word wall and in writing center to practice letter formation</li> </ul>
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# STANDARD 1.6: SPEAKING AND LISTENING

**BIG IDEA:** Speaking and listening are connected skills that build the foundation for literacy and communication.

**ESSENTIAL QUESTION:** How do I listen for meaning? How do I appropriately express my thoughts?

## 1.6.1 DISCUSSION

### STANDARD STATEMENT

- Listen and respond attentively to conversations
- Ask and answer relevant questions
- Follow two-step directions

### EXEMPLARS (EXAMPLES)

The learner will:

- Make a statement that shows attention to the conversation
- Ask or answer a question with a response that makes sense
- Respond to adult's directions

### SUPPORTIVE PRACTICES

The adult will:

- Engage children in conversation about topics of interest daily
- Ask questions regularly
- Reinforce following directions

## 1.6.2 LISTENING SKILLS

### STANDARD STATEMENT

- Share experience when asked
- Speak in simple sentences
- Recite rhymes, songs and familiar text in a group
- Answer questions

### EXEMPLARS (EXAMPLES)

The learner will:

- Talk about experiences clearly using some details
- Speak clearly enough to be understood by most listeners
- Use appropriate volume to be heard by group, paying attention to inside and outside voices
- Participate in fingerplays and songs
- Practice and play with words and language
- Answer question about shared information

### SUPPORTIVE PRACTICES

The adult will:

- Speak to and engage children in group and individual conversations every day
- Model appropriate volume when speaking
- Introduce children to new words through fingerplays, songs and rhymes
- Ask children questions that involve detailed answers instead of one word responses

## 1.6.3 DISCUSSION

### STANDARD STATEMENT

- Communicate using detail when relating personal experiences
- Pose questions and listen to ideas of others
- Contribute to class discussion

### EXEMPLARS (EXAMPLES)

The learner will:

- Use details to share personal experiences
- Ask questions and listen to others to acquire new knowledge
- Participate respectfully in class or group discussions

### SUPPORTIVE PRACTICES

The adult will:

- Encourage children to use detail in describing experiences
- Encourage children to ask questions to find out more information
- Model appropriate participation in group or class discussions including polite interactions, one person speaking at a time or asking questions

## 1.6.4 PRESENTATION

### STANDARD STATEMENT

- Share information about an item of interest



### EXEMPLARS (EXAMPLES)

The learner will:

- Talk about an object or experience during circle time
- Tell teacher or peer about a home experience or event
- Respond to questions about shared information

### SUPPORTIVE PRACTICES

The adult will:

- Give children time to talk with each other throughout the day
- Use meal time as an opportunity for peer sharing and discussion
- Re-phrase learners' sentence structure or grammar by repeating the sentence properly
- Praise children's efforts to share information
- Introduce new ideas or words to increase vocabulary

## STANDARD 1.7: CHARACTERISTICS AND FUNCTIONS OF THE ENGLISH LANGUAGE

**BIG IDEA:** Information can be shared in many ways.

**ESSENTIAL QUESTION:** How do I communicate in more than one way?

### 1.7.1 COMMUNICATING IN MORE THAN ONE LANGUAGE

#### STANDARD STATEMENT

- Use verbal and nonverbal language to communicate for a variety of purposes
- Repeat a few words in a language other than native language

#### EXEMPLARS (EXAMPLES)

The learner will:

- Use words and gestures to communicate meaning in many forms
- Say words in a new language after hearing them

#### SUPPORTIVE PRACTICES

The adult will:

- Encourage children to use words frequently
- Model common sign language signs
- Introduce words in new languages for familiar objects or words such hello, numbers, goodbye or friend

## STANDARD 1.8: RESEARCH

**BIG IDEA:** Information to answer questions is available through a variety of resources.

**ESSENTIAL QUESTION:** Where can I go to find the answer to my question?

### 1.8.1 INQUIRY BASED PROCESS

#### STANDARD STATEMENT

- Ask questions about topics of personal interest to gain information

#### EXEMPLARS (EXAMPLES)

The learner will:

- Ask adult for explanations or information using why, how, where and when questions, such as “Why do leaves turn colors?” or “Where are the towels?”

#### SUPPORTIVE PRACTICES

The adult will:

- Engage children in discussions about interests such as cars, dinosaurs or dogs

### 1.8.2 LOCATION OF INFORMATION AND CITING SOURCES

#### STANDARD STATEMENT

- Locate information on identified topics using resources provided by teacher

#### EXEMPLARS (EXAMPLES)

The learner will:

- Use books or computer programs to find new information
- Use a cookbook to find a recipe or a phone book to get a phone number during dramatic play

#### SUPPORTIVE PRACTICES

The adult will:

- Provide a variety of resources on topics that interest children including books, computer programs, maps or pictures

### 1.8.3 ORGANIZATION AND PRODUCTION OF FINAL PRODUCT

#### STANDARD STATEMENT

- Produce a simple project based on research with assistance

#### EXEMPLARS (EXAMPLES)

The learner will:

- Create a picture or other product using information learned through research

#### SUPPORTIVE PRACTICES

The adult will:

- Support children, ask questions and encourage thinking while children are working on a project based on research

## STANDARD 1.9: INFORMATION, COMMUNICATION AND TECHNOLOGY LITERACY

**BIG IDEA:** Technology provides access to new information.

**ESSENTIAL QUESTIONS:** How do I use technology to gain information?

### 1.9.1 MEDIA AND TECHNOLOGY RESOURCES

#### STANDARD STATEMENT

- Identify technology that can be used to gain information
- Use age appropriate computer program after training

#### EXEMPLARS (EXAMPLES)

The learner will:

- Name computer and television as technology that can give information
- Use the computer with assistance from the teacher

#### SUPPORTIVE PRACTICES

The adult will:

- Talk about ways that television and computers can help us to learn new things
- Model and support learners using the computer
- Provide various computer programs for children's use during free play
- Limit amount of time children spend on the computer at one sitting to 15 minutes or less

## LANGUAGE AND LITERACY DEVELOPMENT GLOSSARY

**Alliteration** – The repetition of initial consonant sounds in neighboring words

**Antonym** – A word that is the opposite of another word.

**Characterization** – The method an author uses to reveal characters and their various personalities

**Compare** – Place together characters, situations or ideas to show common or differing features in literary selections

**Context Clues** – Information from the reading that identifies a word or group of words

**Concepts of Print** – Print goes left to right; one to one match with voice to print, concept of first and last; concept of letter, word, sentence, space, letter order in words is important; different punctuations have meaning

**Conventions of Language** – Mechanics, usage and sentence completeness

**Decoding** – Analyzing text in order to identify and understand individual reading

**Echo Reading** – Reading of a text where an adult or an experienced reader reads a line of text and student repeats the line

**Emergent Literacy** – One stage of literacy development; reading and writing behaviors that precede and develop into convention and literacy

**Expressive Language** – Being able to convey messages using words

**Evaluate** – Examine and judge carefully

**Fine Motor** – Demonstrate increased control of hand and eye coordination; using hands and fingers such as in writing, painting, drawing, modeling clay or pinching clothespins

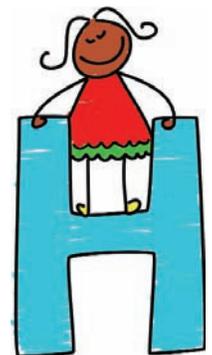
**Fluency** – The clear, easy, written or spoken expression of ideas. Freedom from word-identification problems which might hinder comprehension in silent reading or the expression of ideas in oral reading

**Genre** – A category used to classify literary works, usually by form, technique or content (prose, poetry)

**Guided Reading** – Teachers work with students at their instructional level to guide them in using context, visual and structural cues

**Homophone** – One of two or more words pronounced alike, but different in spelling or meaning (hair/hare; road/rode)

**Language Experience** – Reading own writing; teacher takes dictation from students or students do own writing. Use student's own words as reading material; an effective way to encourage self-expression and build awareness of the connections between oral and written language.



LANGUAGE AND LITERACY DEVELOPMENT GLOSSARY *continued***Learning Styles** –

- Visual (learn through seeing) needs to see the teacher's body language and facial expression to fully understand the content of the lesson
- Auditory (learn through listening) learns through lectures, discussion and listening and needs to talk things through
- Tactile/kinesthetic (learn through moving and touching) learns best through a hands-on approach actively exploring the physical world around them

**Literary/Story Elements** – The essential techniques used in literature (characterization, setting, plot, theme, problem, solution)

**Literary Devices** – Tools used by the author to enliven and provide voice to the writing (dialogue, alliteration)

**Multiple Intelligences** – Howard Gardner's theory of intelligences

- Visual –spatial (ability to perceive the visual)
- Verbal-linguistic (ability to use words and language)
- Logical/mathematical (ability to use reason, logic and numbers)
- Bodily/kinesthetic (ability to control body movements and handle objects skillfully)
- Musical/rhythmic (ability to produce/appreciate music, sound, rhythm)
- Interpersonal (ability to relate and understand others; other people's feelings)
- Intrapersonal (ability to self-reflect and be aware of one's inner state of being; self awareness)
- Naturalist (ability to recognize, categorize and draw upon certain features of the environment)

**Narrative** – A story, actual or fictional, expressed orally or in writing

**Onset** – A sound in word that comes before the vowel

**Phonemic Awareness** – Ability to hear and identify parts of spoken language and auditorily divide into phonemes

**Phoneme** – A sound unit of speech

**Phonics** – A way of teaching reading that stresses sound symbol relationship; refers to the relationship between the letters and letter sounds of a language

**Phonological Awareness** – A broad term that includes phonemic awareness. In addition to phonemes, phonological awareness refers to larger spoken units such as rhymes, words, syllables and onsets and rimes

**Picture Walk** – A pre-reading strategy that is an examination of the text looking at pictures to gain an understanding of the story and to illicit story related language in advance of reading the story

**Point of view** – The way in which an author reveals characters, events and ideas in telling a story; the vantage point from which the story is told

**Print Awareness** – Ability to understand how print works

**Reading Awareness** –

- Uses the language of literacy (top, bottom, same, different)
- Identifies the beginning, middle, and end of a story, with the main idea coming first and details added later
- Demonstrates awareness that language can be written down and read later
- Differentiates between pictures and words
- Shows curiosity about environmental print
- Differentiates between pictures and words

**Reading critically** – Reading in which a questioning attitude, logical analysis and inference are used to judge the worth of text; evaluating relevancy and adequacy of what is read; the judgment of validity or worth of what is read, based on sound criteria

**Receptive Language** – Being able to receive and give meaning to message/words heard

**Research** – A systematic inquiry into a subject or problem in order to discover, verify or revise relevant facts or principles having to do with that subject or problem

**Rime** – The part of a syllable that contains at least one vowel and all that follows

**Shared Reading** – Teacher guides the entire class through stories with a high level of support; sharing and reading a story together (echo reading, choral reading or fill the gap reading)

**Shared Writing** – Teacher and learner work together to compose a message or story

**Tone** – The attitude of the author toward the audience and characters (serious or humorous)

**Voice** – The fluency, rhythm and liveliness in writing that make it unique to the writer



# PARTNERSHIPS FOR LEARNING

## FAMILIES, LEARNING ENVIRONMENTS AND COMMUNITIES



**T**he school experience consists of much more than the academic content that teachers share with students every day. School success is also dependent on children’s ability to learn, their interest in learning, and the connections between schools, community agencies and families that enable the child to learn in a way that supports his or her own learning style, needs and home experience. The partnership, links and connections that begin in the early childhood years between teachers and administrators and families, along with the other agencies in which a child or family interacts are critical to providing a holistic and seamless approach to children’s learning. Schools and families should work together to share information about individualized learning plans and goals; assure positive transition to and from the current school setting; and identify and refer family members to other community agencies when appropriate.

### WONDER AND DELIGHT!

**Y**oung children are curious, and from birth, they naturally seek out problems or questions to solve. They use their senses to explore materials and the environment and the search for answers to perceived problems or situations is motivational, holding their attention and creating their enthusiasm for learning. When classrooms or learning environments are structured to promote this curiosity or a sense of wonder and delight, they use instructional strategies that are based on inquiry. Inquiry is the active searching for knowledge and understanding of a specific idea and occurs most successfully when adults’ intentionally create activities and experiences that allow children to use previously learned knowledge to understand new information. The adults’ role during this active exploration is to scaffold children’s thinking by asking “open-ended” questions that encourage problem solving and support children’s imagination and story-telling. Open-ended questions or statements such as, “I wonder why that’s painted blue” or “If you were Sally, what would you have done?” Allow children to express their thoughts, think creatively and problem solve. They are a more successful choice to encourage learning and critical thinking than closed questions, such as “What color did you choose?” or “Did Sally make a good choice?” that typically result in short answers that don’t ask or provide good insight into children’s thinking.



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## STANDARD 20.1: CONNECTIONS: SHARED UNDERSTANDING OF FAMILY AND SCHOOL VALUES, PHILOSOPHIES AND CULTURES

**BIG IDEA:** The relationship between the family and school personnel is a critical foundation to children's success in school.

**ESSENTIAL QUESTION:** How do schools understand families' home lives, their values, and attitudes towards learning? How do schools incorporate family preferences and interests into the life of the classroom? How do schools assure that families are familiar with and accepting of school values, attitudes and philosophies?

### STANDARD STATEMENT

- Offer an on-site enrollment meeting where family can meet school personnel and observe the classroom where the child will be attending
- Share families' and school routines and discuss any needed accommodations
- Provide and regularly review a Parent Handbook that outlines program expectations and operating details
- Offer parent-teacher school events that provide updates and give families opportunities to participate in school life
- Identify home culture, language, and routines and how they might impact a child's adjustment to school
- Discuss schedules, events or past experiences that may impact a child's school experience
- Share instructional philosophies that help families understand the school structure

### THE FAMILY AND SCHOOL TOGETHER

- Participate in introductory enrollment meetings that enable both family and school representatives to share values, attitudes, philosophies about learning along with unique details and needs of the child and family
- Provide a classroom tour for child and family where they can meet the teacher and explore the classroom setting
- Discuss families' needs for drop-off and pick-up, health concerns, and potential language barriers
- Hold a "Back to School" or Open House night
- Talk about a recent event, such as divorce or death, which may impact a child's behavior and what might occur at school as a result; discuss ways to communicate reciprocally about child's adjustment
- Discuss child guidance and management strategies so both family and school understand the similarities and differences in approach
- Talk about previous group experiences and child's reaction – what might be expected on the first few days
- Ask questions to learn about the child's temperament
- Ask child to bring to school pictures of family members, home environment or other important home elements that might make the adjustment to a new school easier
- Support family's apprehensions during the first few weeks of school by calling them on the first day to describe child's adjustment, or where appropriate, inviting the family to stay with the child for increasingly shorter periods of time prior to drop off
- Formulate a survey or questionnaire that can be done orally or in writing to learn about family attitudes and philosophy on child rearing, learning, reading
- Talk about the classroom structure and how children learn through play
- Learn about who the child considers 'family' and how the family defines itself, including extended family members if relevant

20.1.1 INFORMATION EXCHANGE



CONTINUED...

## STANDARD 20.1: CONNECTIONS: SHARED UNDERSTANDING OF FAMILY AND SCHOOL VALUES, PHILOSOPHIES AND CULTURES

### 20.1.2 HOME TO SCHOOL CONNECTIONS

#### STANDARD STATEMENT

- Identify family practices and traditions that should be included within the classroom
- Work with families to identify books, songs and finger plays, dances, foods, and toys that should be included in the classroom or school environment; ask for donations
- Learn about the family and home setting and incorporate into the school experience, asking for updates and new information regularly
- Invite family members into the classroom to discuss cultural information with the children, to participate in classroom life, or to identify community locations or businesses that can be visited
- Work with families to determine child's best classroom placement including when to transition from one to the next, personality types

#### THE FAMILY AND SCHOOL TOGETHER

- Identify ways to assure the child's positive and comforting entry into a new classroom setting, such as a picture in the cubby, a stuffed animal or blanket
- Encourage volunteers and program participation from cultural groups in the community such as foster grandparents or other multi-generational connections
- Determine if child may eat traditionally served foods, and celebrate holidays
- Use family or culturally specific phrases or words to describe activities or materials
- Ask about family members, calling them by name, such as how is the newborn, and how grandpa is doing after return home from hospital
- Add culturally-specific materials and experiences into the schedule and environment such as adding a wok to the cooking area, or counting in both English and Spanish during morning message
- Invite a family member to teach the class a culturally-specific song or to provide the words to the song
- Display family pictures inside and outside the classroom
- Seek out community volunteers to share information about specific events or activities that are meaningful to children
- Invite family members to participate in classroom events, whenever possible
- Serve familiar cultural foods and introduce new traditional foods periodically – such as rigatoni with cheese or bagels and cream cheese
- Encourage children to show pride in family-specific beliefs or practices by showing interest and describing them to the class

### 20.1.3 SCHOOL TO HOME CONNECTIONS

#### STANDARD STATEMENT

- Assure that family communications are done in culturally-sensitive ways that accommodate family literacy levels, and culture barriers
- Regularly send home information about the child's growth and progress and adjustment to the school setting
- Discuss the program and classroom operational procedures such as absences, snow delays, payment, etc and learn if there are potential challenges for families, making accommodations as appropriate
- Make available voluntary "at home" activities that families can complete with child, being sensitive to family structure and culture
- Create an "open-classroom" policy where family members can visit or volunteer in the classroom or school
- Where appropriate, complete home visit with family
- Support families' efforts to build the child-child or family-family connection

#### THE FAMILY AND SCHOOL TOGETHER

- Create videos, picture books and written schedules that depict the classroom daily routine and send home to families as requested
- Ask family members to identify successful accomplishments the child may have completed at home during the week and acknowledge them in school
- Provide connections between school and school activities such "We are learning about caterpillars and read The Very Hungry Caterpillar. Here's green paper and scissors for you to make a caterpillar at home"
- Take a picture of a child at school, such as sitting with a completed block structure or wiping the table after lunch, and send home to family or email it to family member, "Look what Tamika did today!"
- Disseminate newsletters that highlight key events in the life of the program and the classroom; identify key songs, books and recipes, and clarify a key program expectation
- Post the daily schedule in the parent information area for families to become familiar with the sequence of the day
- Regularly update classroom or program message boards to keep information current and fresh
- Create a classroom web page and provide family members with the link – include a bulletin board or question and answer section that is checked by classroom staff regularly
- Provide opportunities for families to meet each other and connect based on commonalities, such as "Miles' family lives in your neighborhood too" or "Sandy's mom just found out she's going to have a new baby also", being respectful of confidentiality

**STANDARD 20.2: FAMILY ENGAGEMENT**

**BIG IDEA:** Children's motivation to learn and succeed in school is impacted by family support and involvement in the life of the program.

**ESSENTIAL QUESTION:** How do families and schools work together to make decisions about the program? What kinds of school events and activities encourage family participation? How do we assure that information exchange is reciprocal?

**20.2.1 SHARED GOVERNANCE OR DECISION MAKING****STANDARD STATEMENT**

- Implement a family-school annual review of program operation
- Develop and update annually a Parent Manual that details operational procedures
- Establish conflict resolution policies that identify procedures for complaints or suggestions
- Post regulations and program requirements in strategic locations within the school so family members can review it regularly
- Offer training to Advisory or Board on shared governance

**THE FAMILY AND SCHOOL TOGETHER**

- Invite family feedback from classroom observations and share summary of results
- Invite family members to participate in oral interviews about the program experience
- Create a Parent Handbook committee which includes staff, families and community members that annually reviews information and suggests updates as needed
- Develop a joint family-school committee that investigates new state, federal or local initiatives that may impact the school's operation and recommends next steps
- Identify a procedure which includes family members and staff to consider complaints and make recommendations for improvement
- Disseminate parent surveys or interviews to all or a percentage of the clientele which provides feedback about general program operation or about newly instituted policies
- Inform families of ways to share concerns or worries about school policy and develop a review process to handle issues
- Design a Governing Board or Advisory Committee whose members represent families, community agencies and school personnel
- Involve the families in program goal-development and strategic planning

**20.2.2 SPECIAL EVENTS AND ACTIVITIES****STANDARD STATEMENT**

- Learn families' interest and capacity for participation in specific events such as a holiday party, and graduation event
- Offer family education events such as parenting classes, sign language, health and safety that reflect families' interests and needs
- Incorporate unique cultural events or beliefs into classroom life

**THE FAMILY AND SCHOOL TOGETHER**

- Inform families about community cultural events that may be occurring at specific times of the year and determine if/how the event could be expanded into the classroom
- Ask a family to share information about a specific event, such as Chinese New Year, and help you design a related activity
- Within classrooms or programs, come to consensus about how holiday celebrations or birthdays should occur at school
- Create a family resource area that contains books, toys, and informational pamphlets that families can access
- Design parent education events that families can do together after work, such as Parents as Teachers workshops, or ways to transition children into kindergarten
- Offer parent nights or events at mutually-agreed upon times, including meals or babysitting when appropriate
- Seek feedback from families to design field trips or big classroom events that may be of particular interest to the children
- Ask families if they'd like to volunteer materials or information about specific cultural events
- Increase awareness by finding locations in the community that will allow children's work to be displayed, such as a library or town hall

**STANDARD 20.3: SUPPORTING CHILDREN'S LEARNING**

**BIG IDEA:** Early childhood programs must work closely with families to support children's development and learning, both at school and at home.

**ESSENTIAL QUESTION:** How do families and school work together to identify children's skills, interests and long-term and short-term goals for learning? How do I understand families' at-home learning attitudes and strategies? How do I provide individualized and meaningful at-home learning connections to the school experience?

**20.3.1 SCREENING AND ASSESSMENT****STANDARD STATEMENT**

- Identify screening, assessment and referral processes that include families' involvement
- Utilize screening and assessment instruments that are aligned with the early learning standards
- Assure that children are screened for health, mental health, dental, social-emotional, and cognitive development and the results are shared with families
- Be familiar with community agencies that provide additional screenings or assessments upon referral
- Provide information on child development and parenting that identifies age-appropriate skill development
- Conduct age appropriate baseline and ongoing authentic assessments to identify strengths and areas of focus for future learning and development that are culturally-sensitive, delivered in the language requested by the family and whenever possible, incorporate family feedback
- Utilize multiple sources of evidence to understand individual children's growth and development, including parent report, observations, and standardized checklists

**THE FAMILY AND SCHOOL TOGETHER**

- Assure families' understanding of the purpose of screening and prepare them for the process, including their input and shared-decisions about referrals when appropriate
- Share initial results of screening and assessment with the family in a way that enables family adults to understand the child's strengths and areas for focus
- Work with family to explain screening and assessment results and identify how they align with home experiences and observations
- Work together to identify referral agencies where needed and support families' contact with them
- Be sensitive to some families' reluctance to act on potential referral or additional evaluation recommendations, periodically re-assessing and discussing until action is taken, if needed
- Collect and share portfolio items with families, asking for at-home contributions as well, that show children's growth and development of specific skills
- Provide information on child development that is written in easy-to-understand language

**20.3.2 GOAL DEVELOPMENT****STANDARD STATEMENT**

- Use assessment results to lay the framework for understanding individual children's strengths and areas of need
- Share with parents information about each child, including stages of development, interests and assessed skill levels, identifying those that are on track and those that could use additional attention
- Meet periodically to discuss previously determined goals, identify any strengths or improvements and make new decisions about learning goals and activities
- Periodically assess the learning environment and provided activities for age, linguistic and cultural appropriateness and modify if needed

**THE FAMILY AND SCHOOL TOGETHER**

- At the family-school meeting, both family and teaching adult share information about the child's interests and skills to facilitate joint planning of activities and goals
- Teaching adult shows family the continuum of learning development in the Key Areas of Learning and together they identify where the child falls on the continuum, next steps and whether it should be a specific area of instructional focus
- Family and teacher agree on key skills or attitudes for focus and accommodate each other's interests when appropriate. For example, the family changes math goal expectation from "counting to 100" to "counting to 20," based on learning standards or the teacher adds a math skill since it is important to family even though it wasn't identified in the assessment
- Teaching staff and family talk about ways each goal could be supported at home, identifying basic at-home routines that can be used to "teach", such as counting steps or sorting socks, and the types of intentional instruction that will occur at school
- Classroom personnel praise family interest and participation, helping them to see that they are the young child's primary teacher
- Participate in development and review of child's IFSP or IEP, working with the parent and intervention program to formulate appropriate expectations

**STANDARD 20.3: SUPPORTING CHILDREN'S LEARNING****20.3.3 ONGOING PROGRESS REVIEW****STANDARD STATEMENT**

- Classroom adults and families should work as a team to review children's goals and progress regularly and to develop new strategies that promote children's successful growth and development
- Classroom staff and families should participate in a minimum of two face to face conferences to discuss children's developmental progress and other pertinent updates
- Offer informal opportunities for family members to converse with classroom adults as needed about children's progress
- Schools should offer a wide variety of materials and ideas that link home and school learning environments, offer information on child development and parenting and support parents' interest and participation in the child's learning process

**THE FAMILY AND SCHOOL TOGETHER**

- Send home a brief note that identifies growth towards skill mastery such as, "Mary counted to 10 today during circle time!" Read comment to child so she/he feels excited about sharing the note with the family adults
- Schedule a fall and spring conference date, identifying with the family where the conference should occur either home or school, and accommodating families' unique schedules
- Offer notes to families (or other culturally appropriate communication strategies) that help families understand what's occurring in the classroom and how it could link to home, such as "We're going to work on gross motor skills this week with relay races, outside play, and a trip to the park. Take them to the park this week and watch how their skills have grown"
- Identify potential areas of concern for shared focus, "I noticed Sammy was trying really hard to hop on one foot, but was getting frustrated. Have you seen him do that at home? You may want to play some jumping and hopping games like we're doing at school"
- Develop strategies for sharing children's accomplishments. Ask family members to send samples of children's at-home work to school and post or send home classroom samples that help families notice progress
- Remind children how much they're grown, "Remember when you had trouble making the S in your name? Now, look at your name. You've got the S T and E. Way to go!"
- Identify the skills being learned in each activity, helping families to understand the role of play and active learning in the instructional process

**20.3.4 COMMUNITY SUPPORTS****STANDARD STATEMENT**

- Identify and understand the services that are provided within the community and identify contacts within each to facilitate collaborative work
- Develop ongoing information-sharing processes with other agencies who work with families
- Create information-sharing processes with other educational or youth activity programs such as the local fitness center, or library
- Develop and honor confidentiality policies regarding information exchange
- Utilize community agency's suggestions to enhance classroom experiences for all children

**THE FAMILY AND SCHOOL TOGETHER**

- Tell families about special gym classes or music workshops when children show a specific interest or need in those areas, collecting and making available brochures
- Invite a gym instructor into the classroom regularly to help children develop coordination or balance
- Ask the local librarian to provide books and reading activities during an evening parent meeting
- Invite school district personnel to review kindergarten registration and attendance policies with outgoing preschool families
- Work with Early Intervention to assure referrals have been received and child will get evaluations or services as needed
- Incorporate specialists' ideas such as a speech therapist or behavioral therapist into the classroom practice to support all children, including the child with a special need
- Assure confidentiality statements and release of information approvals have been signed prior to information sharing approvals have been signed prior to information sharing

**STANDARD 20.4: TRANSITION**

**BIG IDEA:** Schools and families must work together to coordinate information exchange from one setting to another that will assure children's seamless learning experiences.

**ESSENTIAL QUESTION:** How do I create a seamless transition into and out of the program? What resources and materials do I make available for families to assure at-home learning links with school learning?

**20.4.1 PROGRAM ENTRY****STANDARD STATEMENT**

- Create processes and procedures for welcoming incoming families through enrollment meetings, sharing of expectations and values, parent handbooks and discussion of sensitive issues that may impact school success
- Identify welcome strategies that excite children and families about their upcoming, new experience
- Establish processes for information-sharing with sending schools
- Develop strategies for communicating with community agencies with which incoming families have been involved for information exchange as well as parent interest in continuing

**THE FAMILY AND SCHOOL TOGETHER**

- Provide incoming family forms to complete prior to the enrollment visit so they can gather the needed information
- Welcome incoming family by holding an enrollment meeting that reviews the daily schedule, program and classroom expectations, values and philosophies as well as pre-enrollment requirements such as physical, and first tuition payment
- Prior to the child's attendance, learn about the child's interests and display toys or activities that may be especially appealing, display books about the first day of school, post pictures from home, and create activities that will capture the child's interests
- Create orientation books or manuals for both children and adults – "What to expect when you come to school"
- Invite family to visit at least once prior to the first full day, giving children time to meet the new teacher and play in the classroom; pair up a child who has been in program for a while with a new child
- With parent permission, communicate with sending school about child's past experiences, review screening and assessment results and other information that will support the child and family's move from one school to another
- Wherever possible, use some of the sending school's routines or materials, such as singing the clean-up song or displaying home-made books with pictures of sending school, to ease child's transition into the new situation
- Develop on-going classroom communication between both schools, such as encouraging children to write letters or draw pictures about their new experience and send to the sending school or create "pen pals" between sending and receiving schools
- Develop process for assessing child's readiness to move from one age group to another that includes parent feedback



**STANDARD 20.4: TRANSITION****20.4.2 PROGRAM EXIT****STANDARD STATEMENT**

- Develop policies and procedures for transferring information about child's program participation to the next school location
- Help family understand the expectations and schedules of the receiving school, mapping out strategies for success whenever possible
- Work with receiving school to facilitate pen pals, visits, or other activities where the children can become familiar with the new school and stay in touch with the old school
- Set up information-sharing processes with receiving school to discuss child's goals, progress, and interests

**THE FAMILY AND SCHOOL TOGETHER**

- Meet with receiving schools to identify commonalities between the schools' approaches and convey them to families so they will have some comfort with similar routines and activities
- Establish information-exchange processes between sending and receiving school that provide opportunities for teachers to share successful strategies for learning that will support the transition
- Provide the receiving school with materials or activities that can be used to offer familiarity and comfort during the transition, such as a "treasure hunt" activity or set of questions to answer in the new school or picture books of the sending school
- Display materials from the receiving school that children will recognize when they transition such as a picture book of the new school, classrooms and teachers; talk with children about what to expect
- Send child to new school with a portfolio of completed work – either to keep at home or to share with the school
- Arrange a time to visit child at new school or to call and talk with family after they have left the sending school atmosphere

**20.4.3 COMMUNITY CONNECTIONS****STANDARD STATEMENT**

- Identify and include child's participation in other schools or programs on information that is sent to receiving school –in transition
- Develop relationship with local Early Intervention agencies, birth to three and three to five, and create process for information and referral exchange
- Participate in the county Community Engagement Group and other community-collaborative agencies that advocate for early childhood locally and statewide early
- Assure the program's representation at county or community days
- Produce regularly-updated program brochures or promotional materials and distribute throughout the community
- Arrange for information-sharing sessions with local school districts to develop shared expectations for entry and exit into the programs
- Offer early childhood professional development to other community agencies
- Invite community agencies to provide special seminars or workshops for families

**THE FAMILY AND SCHOOL TOGETHER**

- Develop a transition form that assures transfer of information from sending to receiving school
- Schedule meetings with Early Intervention providers, local Head Start agency to introduce your school and to discuss collaboration
- Invite local librarian to visit the school to present a story hour. Invite family members
- Hold a registration day where families can register children for kindergarten at your familiar location
- Use field trips to introduce children to nearby agencies and resources that may be tapped or invite community agency representatives to visit the school and read to children or work on activities with small groups
- Meet with local school district to review their strategies for use of the learning standards in their instruction and develop common grounds
- Post a display shelf of community agencies' brochures for family access or feature a community agency in the monthly newsletter
- Disseminate state resources such as [Kindergarten, Here I Come](#), [Kindergarten, Here I Am](#) and [Learning is Everywhere](#)
- Participate in community events that allow school to stay updated on state and local events or create a booth/display for county events
- Join online state list serves to stay current (not everyone might know what these are, thus the clarification)
- Host joint meetings of schools, district, community agencies to network and talk about community needs
- Offer PQAS standards-based training to other community providers
- Disseminate agency newsletter to community agencies

# SOCIAL AND EMOTIONAL DEVELOPMENT

## LEARNING ABOUT MYSELF AND OTHERS



**A**ll children need early childhood programs that nurture emotional security, positive self concept and respect for others. Children’s social and emotional development is strengthened when they have classroom experiences that promote a sense of identity and belonging within an accepting and responsive environment. Teachers support children’s self identity and social competence by modeling respect for the children, using positive guidance techniques that support the development of self control and interpersonal problem solving, and by encouraging positive approaches to learning and interacting with others.

### TEMPERAMENT

**E**very human being has a unique way of looking and interacting with the world known as temperament. Some of us are reserved or shy; others are outgoing and make friends easily. Some of us enjoy learning new things and others are wary about trying new things or dealing with new situations. These temperament traits influence the way in which a child learns, interacts with others, and expresses himself. Adults need to adapt their teaching practices to match the individualized needs of children and consider how their own temperament affects the way in which important relationships with children are developed and maintained.



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# STANDARD 25.1: SELF CONCEPT (IDENTITY)

**BIG IDEA:** Children see themselves as valuable and worthwhile individuals in their homes, classrooms and communities.

**ESSENTIAL QUESTIONS:** How do I know what my preferences are? How do I develop a positive feeling about myself? How do I grow confident in myself and my abilities?

25.1.1 SELF AWARENESS

**STANDARD STATEMENT**

- Demonstrate awareness of self and one’s own preferences
- Know and state independent thoughts and feelings

**EXEMPLARS (EXAMPLES)**

The learner will:

- Refer to self as “I”
- Participate in self care activities, such as putting on clothes, pouring milk or zipping jacket
- Choose specific activities, toys, foods when given options
- Show preferences for familiar adults and peers
- Show preference for favorite books, activities and toys
- State preferences such as “I like peas” or “I don’t want to play with blocks”

**SUPPORTIVE PRACTICES**

The adult will:

- Refer to the child by name
- Write or encourage children to write name on papers or pictures
- Provide child with opportunities to make decisions and choices
- Design a daily schedule with a large block of time for child-directed play and learning
- Ask children to share opinions about classroom activities and experiences
- Graph children’s likes and dislikes
- Share enthusiasm and describe child’s abilities and preferences “I see you enjoy building with the blocks on the floor.”

25.1.2 UNDERSTANDING EMOTIONS

**STANDARD STATEMENT**

- Use socially-accepted ways to express emotions
- Recognize and label basic feelings
- Express feelings that are appropriate to the situation



**EXEMPLARS (EXAMPLES)**

The learner will:

- Express feelings that are appropriate to the situation
- Express feelings verbally or through play and artistic representation
- Name a range of feelings, such as happy, sad, angry, surprised
- Control most negative responses by expressing in appropriate ways, such as talking with a peer or telling the teacher

**SUPPORTIVE PRACTICES**

The adult will:

- Offer materials in dramatic play, blocks and art that encourage children to creatively express emotions
- Read books about feelings such as “When Sophie Gets Mad” and talk about the outcome
- Engage children in discussions about how they feel when they experience certain situations (both positive and negative)
- Use expressions such as “I feel” or “That must have made you feel...” when interacting with children
- Describe children’s emotional expressions such as “When your lips are turned down like that, I can tell you’re sad.”

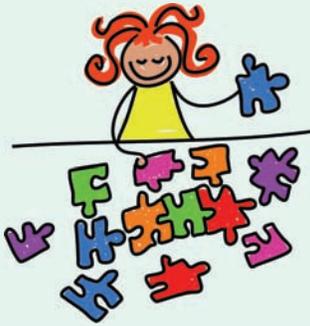
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## STANDARD 25.1: SELF CONCEPT (IDENTITY) continued

25.1.3 COMPETENCE

### STANDARD STATEMENT

- Show pride in own accomplishments
- Choose materials and activities independently
- Participate in new experiences with confidence and independence



### EXEMPLARS (EXAMPLES)

The learner will:

- Choose activities, select materials, and carry out tasks
- Show adult an accomplishment with pride, such as “I made my name!”
- Ask peers to look at pictures or accomplishments with pride
- Demonstrate confidence in own abilities, such as “I can kick that ball really far.”
- Express intent to play in a specific area or to make a certain object
- Independently decide to begin a project or activity
- Work on a task until completion

### SUPPORTIVE PRACTICES

The adult will:

- Display children’s work at their eye level
- Provide encouragement and praise children’s efforts, “You worked really hard on that picture.”
- Be supportive when children want to try something new, giving them time to investigate
- Store materials on the children’s level so they can access them by themselves
- Design activities that combine new experiences with the familiar to engage children in trying new things
- Ask children about their decisions to play or make specific objects, “How did you decide to play with the legos today?” or “What will you make when you go to the art table this morning?”

## STANDARD 25.2: SELF REGULATION

**BIG IDEA:** Children will express feelings, thoughts and needs appropriately to adults and peers.

**ESSENTIAL QUESTIONS:** How do I express my feelings appropriately? How do I manage my feelings? How do I use healthy strategies to manage my behavior?

25.2.1 EMOTIONAL REGULATION

### STANDARD STATEMENT

- Ask for and accept offers of help when needed or appropriate
- Know when to withhold expression of feelings in certain situations
- Adjust to changes in routines and activities with guidance
- Begin to understand the consequences of own behavior

### EXEMPLARS (EXAMPLES)

The learner will:

- Begin to use words to tell others how she/he feels
- Separate feelings from actions
- Use non-verbal and verbal interactions that are congruent with feelings
- Help teacher announce a transition
- Accept warnings about play ending and begin to clean up
- Stop action when told such as “Stop running and use your walking feet”
- Ask and then wait for teacher’s attention

### SUPPORTIVE PRACTICES

The adult will:

- Model genuine, appropriate emotional responses
- Encourage open expression of feelings by asking children how they feel
- Respond to child’s non-verbal and verbal cues
- Offer warnings prior to a change in activity (transition)
- Use picture schedules that describe the flow of the day and explain during morning meeting time if a change will occur that day
- Promptly respond to children’s requests for attention
- Use the Pyramid Model to support children’s social and emotional success

CONTINUED...

## STANDARD 25.2: SELF REGULATION *continued*

**25.2.2 BEHAVIORAL REGULATION**

**STANDARD STATEMENT**

- Demonstrate increased self reliance in self-care activities
- Follow the rules and routines in classroom and other settings with reminders
- Use materials with purpose, safety and respect
- Understand and follow simple classroom rules
- Make transitions between activities after warning
- Wait for teacher approval before acting in required situations
- Recognize unsafe situations and tell an adult
- Clean up or put away materials on own with teacher direction

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Complete self care activities with a minimum of teacher help (toileting, hand washing)
- Remember and express simple classroom rules
- Keep behavior within bounds most of the time
- Complete activities that she/he has started
- Move from one activity to another with minimal adult support
- Respond to adult requests or enter into conversation about the request
- Return materials to the shelves when finished
- Tell adults when she/he has to go to the bathroom.
- Check in with adults when she/he thinks something is not safe
- Take turns and wait for a turn
- Offer to share materials with other children

**SUPPORTIVE PRACTICES**

**The adult will:**

- Use logical consequences and guidance practices that support self-control (“As soon as you clean up, you can go outside” rather than “You didn’t clean up so you can’t go outside.”)
- Provide activities that engage children in self control practice, such as stop-start games or block play
- Whenever possible, wait until play is finished before pulling children from an activity in which they are engaged
- Give advanced notice so that children can bring their play to an end
- Give clear directions with expectation that child will comply
- Ask children to identify safe and unsafe situations
- Develop a few simple and basic classroom rules that children can follow independently

## STANDARD 25.3: PRO-SOCIAL RELATIONSHIPS WITH ADULTS

**BIG IDEA:** Early adult-child relationships, based on attachment and trust, set the stage for lifelong expectations that impact children’s ability to learn, respect adult authority and express themselves.

**ESSENTIAL QUESTIONS:** How do I learn to trust adults? How do I learn to separate from my parents and familiar adults? How do I learn to communicate with my parents and familiar adults?

**25.3.1 TRUST**

**STANDARD STATEMENT**

- Seek help from familiar adults when needed
- Respond to familiar adults’ questions and directions
- Engage in reciprocal conversation with familiar adults

**EXEMPLARS (EXAMPLES)**

**The learner will:**

- Ask for help with fastening pants or jacket
- Comply with teacher directions
- Tell the teacher what happened at home the night before or talk about something special that may be coming up such as, “I’m going to the store with Mommy after school”
- Ask adult to help solve a problem or to help complete a task, “I can’t put this puzzle together”

**SUPPORTIVE PRACTICES**

**The adult will:**

- Create an environment that is nurturing and accepting for all children
- Ask if child wants help before jumping in and solving a situation, “Can I help you with that zipper?”
- Promptly respond to children’s requests for help
- Talk to children about events that are going on in their lives during lunch, “How is baby sister doing?”
- Provide clear and consistent directions
- Follow through with things you’ve said or offered

**CONTINUED...**

## STANDARD 25.3: PRO-SOCIAL RELATIONSHIPS WITH ADULTS

### STANDARD STATEMENT

- Demonstrate affection for familiar adults through hugs, kisses or making gifts
- Separate from familiar adults in a familiar setting with minimal distress
- Show preference for one adult over another when more than one is present

### EXEMPLARS (EXAMPLES)

The learner will:

- Affectionately greet teacher upon arrival to school
- Give adults a picture that has been made just for them
- Smile and show happiness to see parent at end of day
- Affectionately talk about home events and relationship with parents
- Ask to sit at one adult's table or ask to hold teacher's hand on walk
- Say good-bye to parent upon arriving at school and become involved in the life of the classroom

### SUPPORTIVE PRACTICES

The adult will:

- Provide consistency and predictability in daily routines, environment, and staff
- Assign a primary adult for each child when there are multiple adults in the classroom
- Encourage family members to say goodbye to child when leaving the classroom and inform the child where they are going and when they will return
- Tell children when a familiar adult is going to be absent for an extended period of time
- Permit children to keep pictures or comfort objects from home in their cubbies for limited access when sad or upset

## STANDARD 25.4: PRO-SOCIAL RELATIONSHIPS WITH PEERS

**BIG IDEA:** Children will learn to develop healthy relationships through positive peer interactions.

**ESSENTIAL QUESTIONS:** How do I learn to interact with peers? How do I make friends?

### STANDARD STATEMENT

- Imitate others' actions using social play or dramatic play situations
- Initiate play with 1 or 2 peers
- Play cooperatively with a few peers for sustained period of time
- Cooperate in both large and small group activities that are facilitated by adults

### EXEMPLARS (EXAMPLES)

The learner will:

- Seek out companionship from another child
- Re-establish a relationship with others after a conflict
- Use multiple strategies for getting what is needed such as asking another child, then an adult for help
- Ask another child to play, "Do you want to make a block house with me?"
- Act out a conflict or uncomfortable situation during dramatic play
- Participate in group activities like Hokey Pokey or Duck, Duck, Goose
- Play a simple game with another child

### SUPPORTIVE PRACTICES

The adult will:

- Engage in joint activities with children
- Arrange the environment so that children can work together on activities
- Provide duplicate materials (trucks, telephones) so children can play together
- Set aside large blocks of uninterrupted time for child-directed play
- Provide opportunities for one on one conversations between children and adults
- Introduce large group games or activities where children can participate alone or with a partner

25.4.1 SOCIAL IDENTITY



CONTINUED...

# STANDARD 25.4: PRO-SOCIAL RELATIONSHIPS WITH PEERS

25.4.2 RESPECT AND EMPATHY

**STANDARD STATEMENT**

- Respond with empathy to others who are upset
- Seek help from peers
- Share and take turns with adult guidance
- Respect feelings and belongings of peers
- Solve simple conflicts with peers with independence
- Demonstrate polite and respectful interactions
- Demonstrate respect for children’s differences

**EXEMPLARS (EXAMPLES)**

The learner will:

- Express sympathy to a friend who is feeling sad
- Asks another child to help carry a heavy basket of blocks
- Ask for a toy before grabbing it
- Begin to negotiate conflicts that arise using words, “Give me back my toy” before seeking help
- Say “I’m sorry” when she/he bumps into another child or causes a toy to fall
- Use words during a conflict, “Stop hurting me” instead of physically responding
- Show understanding that others might be feeling differently than self
- Identify others’ differences in feelings or thought

**SUPPORTIVE PRACTICES**

The adult will:

- Use eye contact and body proximity to give children support when needed
- Be available to help children resolve conflicts rather than removing the child or the toy
- Give children the words to use in difficult situations, “Tell her how that made you feel”
- Describe others’ feelings during difficult situations, “Look at Susie’s face. She is mad.”
- Read books about empathy and discuss the outcome
- Set timers for toy or equipment sharing
- Invite children to help others, “Can you help Mary with her jacket?”
- Create spaces in the classroom where children can store their own belongings
- Praise children’s efforts to help others



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<http://www.kidsource.com/schwab/developing.reading.skills.html>– Kid Source Online

<http://www.esl4kids.net/> Resources for young English Language Learners

<http://curry.edschool.virginia.edu/go/wil/home.html> Literacy and Head Start (Webbing into Literacy)

<http://www.ed.gov/pubs/CompactforReading/tablek.html> (US Government ideas for kindergarten)

[http://www.ifg-inc.com/Consumer\\_Reports/LearnToRead.html](http://www.ifg-inc.com/Consumer_Reports/LearnToRead.html) Helping your child read– (infancy through age 10) ideas for parents from the US Government

[http://www.ed.gov/inits/americanreads/educators\\_early.html](http://www.ed.gov/inits/americanreads/educators_early.html) Early Childhood and Literacy; US Government

<http://www.fcrr.org/> Florida Center for Reading Research (teacher and parent ideas)

Morrow, Lesley Mandel and Elizabeth Brown Asbury, *Literacy Activities For Early Childhood Classrooms: Literacy Development in the Early Years: Helping Children Read and Write*, Guilford Publishing, 2000 .

Otto, Beverly, *Literacy Development in Early Childhood: Reflective Teaching for Birth to Age Eight*, Prentice– Hall, 2007.

Otto, Beverly, *Language Development in Early Childhood (3rd Edition)*, Prentice– Hall, February, 2009.

## PARTNERSHIPS FOR LEARNING

For more information and for resources to help you design, implement, and evaluate family involvement work, consider making use of the following resources:

Harvard Family Research Project, Harvard Graduate School of Education: *Family Involvement in Early Childhood Education*, Spring 2006

Rimm–Kaufman, S. E., & Pianta, R. C. (2005). Family–school communication in preschool and kindergarten in the context of a relationship-enhancing intervention. *Early Education and Development*, 16(3), 287–316.

Foster, M. A., Lambert, R., Abbott–Shim, M., McCarty, F., & Franze, S. (2005). A model of home learning environment and social risk factors in relation to children’s emergent literacy and social outcomes. *Early Childhood Research Quarterly*, 20(1), 13–36.

Rous, B (2008). Ed.D. *Recommended Transition Practices for Young Children and Families. Results from a National Validation Study*. Lexington: University of Kentucky, Human Development Institute, National Early Childhood Transition Center.

Cox, M. J. (1999). Making the transition. *Early Developments*, 3 (1), 4–6.

Pianta, R. C. & Cox, M. J. (Eds.) (1999). *The transition to kindergarten*. Baltimore, MD: Brooks.

*Successful Kindergarten Transition, 2003, Your Guide to Connecting Children, Families, and Schools*, by Robert C. Pianta, Ph.D., & Marcia Kraft–Sayre, LCSW

*School Readiness and the Transition to Kindergarten in the Era of Accountability (Paperback)* by Robert C. Pianta (Author, Editor), Kyle L. Snow (Editor), 2007

Ramey, S. L., & Ramey, C. T. (1998). Commentary: The transition to school: Opportunities and challenges for children, families, educators, and communities. *The Elementary School Journal* 98, (4) 293–295.

U.S. Department of Health and Human Services, Administration for Children, Youth and Families, Head Start Bureau. (1996). *Effective Transition Practices: Facilitating Continuity: Training Guide for the Head Start Learning Community*. AspeOn Systems Corporation.

## SOCIAL AND EMOTIONAL DEVELOPMENT

Center for Social and Emotional Foundations for Early Learning, [www.vanderbilt.edu/csefel/index.html](http://www.vanderbilt.edu/csefel/index.html)

CASEL: Collaborative for Academic, Social and Emotional Learning: [www.casel.org](http://www.casel.org)

James Comer School Development Program  
[www.schooldevelopmentprogram.org/](http://www.schooldevelopmentprogram.org/)

Rutgers University Social Emotional Learning Law  
[www.rci.rutgers.edu/~melias/](http://www.rci.rutgers.edu/~melias/)



# ACKNOWLEDGEMENTS

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**AMY WIBLE**

Cen Clear Head Start

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**BECKY LEITER**

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LutherCare Child Care

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Zero To Three

**KAREN GRIMM THOMAS**

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**LINDSAY KEIFER**

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**LOLITA GRIFFIN**

Philadelphia Early Childhood Collaborative

**LUCY FLEMING**

Alliance for Infants-Toddlers

**LYNEICE PARKER-HUNTER**

PA Dept of Education

**MARNIE JOHNSON**

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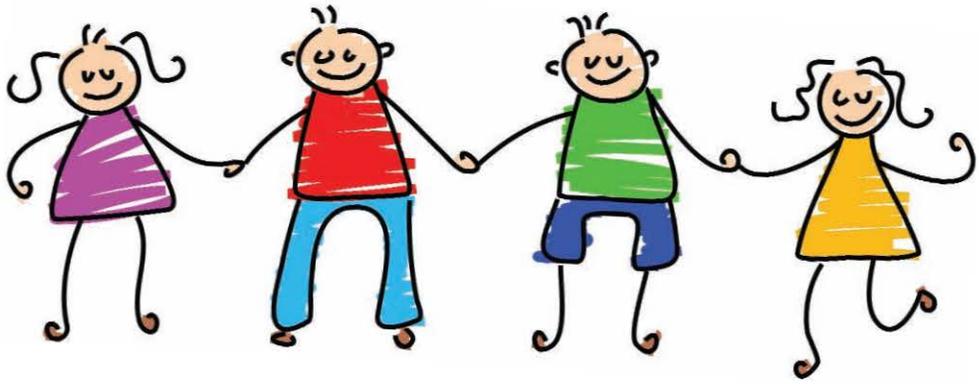
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